

STATION
TAIL NO.
DATE



BOEING CARD NO. 36-R02
AIRLINE CARD NO.

SKILL ENGIN	WORK AREA ENGIN/STRUT	RELATED TASK	INTERVAL	PHASE	MPD REV 007	TASK CARD REVISION APR 22/07
TASK REPLACE		TITLE HIGH PRESSURE CONTROLLER		STRUCTURAL ILLUSTRATION REFERENCE	APPLICABILITY AIRPLANE ENGINE ALL ALL	
ZONES 411 421			ACCESS PANELS 415AL 417AL 425AL 427AL			

MECH	INSP	MPD ITEM NUMBER 36-11-08-4A	
		<p>REPLACE THE HIGH PRESSURE CONTROLLER.</p> <p>THIS CARD IS NOT A SCHEDULED MAINTENANCE TASK. IT IS A COMPONENT CHANGE CARD AND IT IS PROVIDED FOR OPERATOR CONVENIENCE DURING UNSCHEDULED MAINTENANCE ACTIVITIES. SEE APPENDIX A OF THE 767 MAINTENANCE PLANNING DATA (MPD) DOCUMENT, D622T001, FOR A DESCRIPTION OF THE COMPONENT CHANGE CARDS.</p> <p>1. <u>Remove the High Pressure Controller (Fig. 401)</u></p> <p>A. References</p> <p>(1) AMM 24-22-00/201, Electrical Power Control</p> <p>(2) AMM 36-00-00/201, Pneumatic - General</p> <p>(3) AMM 36-11-19/401, Pressure Regulating Valve Controller</p> <p>(4) AMM 71-11-04/201, Fan Cowl Panels</p> <p>(5) AMM 71-11-06/201, Core Cowl Panels</p> <p>(6) AMM 78-31-00/201, Thrust Reverser System</p> <p>B. Prepare for the Removal</p> <p><u>WARNING:</u> RELEASE THE PRESSURE IN THE PNEUMATIC DUCT BEFORE YOU REMOVE A PNEUMATIC SYSTEM COMPONENT. THE HOT, HIGH-PRESSURE AIR CAN CAUSE INJURY TO PERSONS.</p> <p>(1) Remove pneumatic power (AMM 36-00-00/201).</p>	

3 8 5 4	EFFECTIVITY	REPLACE	HIGH PRESSURE CONTROLLER
		36-11-08-4A	36-R02 PAGE 1 OF 6 APR 22/07

MECH	INSP

- (2) To remove the left high pressure controller, open these circuit breakers on the overhead circuit breaker panel, P11, and attach DO-NOT-CLOSE tags:
 - (a) 11S10, LEFT ENG BLEED IND
 - (b) 11S11, LEFT ENG BLEED CONT
- (3) To remove the right high pressure controller, open these circuit breakers on the overhead circuit breaker panel, P11, and attach DO-NOT-CLOSE tags:
 - (a) 11S19, RIGHT ENG BLEED IND
 - (b) 11S20, RIGHT ENG BLEED CONT
- (4) Open this circuit breaker on the left miscellaneous electrical equipment panel, P36, and attach a DO-NOT-CLOSE tag:
 - (a) 36L7 or 36K7, AIR SUPPLY BITE

WARNING: DO THE DEACTIVATION PROCEDURE FOR THE THRUST REVERSER ISOLATION VALVE TO PREVENT THE OPERATION OF THE THRUST REVERSER. THE ACCIDENTAL OPERATION OF THE THRUST REVERSER CAN CAUSE INJURY TO PERSONS OR DAMAGE TO EQUIPMENT.

- (5) Do this procedure: Thrust Reverser Isolation Valve Deactivation for Ground Maintenance (Ref 78-31-00).
- (6) Open the left fan cowl panel, 413AL/423AL (AMM 71-11-04/201).
- (7) Open the left core cowl, 417AL/427AL (AMM 71-11-06/201).

WARNING: OBEY THE INSTRUCTIONS IN THE PROCEDURE TO OPEN THE THRUST REVERSERS. IF YOU DO NOT OBEY THE INSTRUCTIONS, INJURIES TO PERSONS AND DAMAGE TO EQUIPMENT CAN OCCUR.

- C. Remove the High Pressure Controller (AMM 36-11-19/401).
 - (1) Find the high pressure controller (1).
 - (2) Remove the controller for the pressure regulating valve (PRV) (Ref 36-11-19).

EFFECTIVITY	REPLACE	HIGH PRESSURE CONTROLLER
	36-11-08-4A	36-R02 PAGE 2 OF 6 APR 22/07

3
8
5
5

MECH INSP

- (3) Disconnect the electrical connector (12) from the high pressure controller (1).
- (4) Disconnect the control pressure line (2) from the union (3).
- (5) Disconnect the sense lines for the high pressure (11) from the union (3).
- (6) Remove the packing (4) and unions (3).
 - (a) Discard the packing (4).
- (7) Remove the bolts (5) that hold the controller (1) to the mounting bracket.
- (8) Remove the high pressure controller (1).

2. Install The High Pressure Controller

A. Consumable Materials

- (1) D01062, Never-Seez, Pure Nickel Special, NSBT-8N (High temperature anti-seize compound)

B. Parts

AMM		NOMENCLATURE	AIPC		
FIG	ITEM		SUBJECT	FIG	ITEM
401	1	High Pressure Controller	36-11-08	06	410
	3	Union			330
	4	Packing			355
	5	Bolt			400
	6	Washer			405
	7	Pressure Regulating Valve Controller			490
	8	Nut			25
	9	Washer			15
	10	Bolt			5

C. References

- (1) AMM 24-22-00/201, Electrical Power Control

EFFECTIVITY

REPLACE

HIGH PRESSURE CONTROLLER

36-11-08-4A

36-R02

PAGE 3 OF 6 APR 22/07

3
8
5
6

MECH	INSP

- (2) AMM 20-10-22-701, Metal Surfaces
- (3) AMM 36-00-00/201, Pneumatic - General
- (4) AMM 36-11-19/401, Pressure Regulating Valve Controller
- (5) AMM 36-23-00/501, Air Supply BITE System
- (6) AMM 71-11-04/201, Fan Cowl Panels
- (7) AMM 71-11-06/201, Core Cowl Panels
- (8) AMM 78-31-00/201, Thrust Reverser System

D. HPC Installation

- (1) Install the high pressure controller (1) on mounting brackets.
 - (a) Install the bolts (5) and washers (6).
 - (b) Tighten the bolts (5).
- (2) Apply anti-seize compound to all of the sense line fittings.
- (3) Install the new packings (4) and unions (3) on the high pressure controller (1).
 - (a) Tighten the unions (3).
- (4) Connect the control pressure line (2) to the union (3).
 - (a) Tighten the line.
- (5) Connect the sense line for the high pressure (11) to the union (3).
 - (a) Tighten the sense line (11).
- (6) Connect the electrical connector (12) to the high pressure controller (1).
- (7) Install the PRV controller (7) (Ref 36-11-19).
- (8) For the left high pressure controller, remove the DO-NOT-CLOSE tags and close these circuit breakers on the P11 panel:
 - (a) 11S10, LEFT ENG BLEED IND

3
8
5
7

EFFECTIVITY



REPLACE

36-11-08-4A

HIGH PRESSURE CONTROLLER

36-R02

PAGE 4 OF 6 APR 22/07

MECH	INSP

- (b) 11S11, LEFT ENG BLEED CONT
- (9) For the right high pressure controller, remove the D0-NOT-CLOSE tags and close these circuit breakers on the P11 panel:
 - (a) 11S19, RIGHT ENG BLEED IND
 - (b) 11S20, RIGHT ENG BLEED CONT
- (10) Remove the D0-NOT-CLOSE tag and close this circuit breaker on the P36 panel:
 - (a) 36L7 or 36K7, AIR SUPPLY BITE
- (11) Supply electrical power (AMM 24-22-00/201).
- (12) Do the Air Supply BITE - System Test (AMM 36-23-00/501).
- E. Put the Airplane Back to Its Usual Condition

WARNING: OBEY THE INSTRUCTIONS IN THE PROCEDURE TO CLOSE THE THRUST REVERSERS. IF YOU DO NOT OBEY THE INSTRUCTIONS, INJURIES TO PERSONS AND DAMAGE TO EQUIPMENT CAN OCCUR.

- (1) Close the left thrust reverser, 415AL/425AL (AMM 78-31-00/201).
- (2) Close the left core cowl (AMM 71-11-06/201).
- (3) Close the left fan cowl panel, 413AL/423AL (AMM 71-11-04/201).
- (4) Do this procedure: Thrust Reverser Isolation Valve Activation (AMM 78-31-00/201).
- (5) Remove electrical power if it is not necessary (AMM 24-22-00/201).
- (6) AMM 71-11-04/201, Fan Cowl Panels
- (7) AMM 71-11-04/201, Fan Cowl Panels

3
8
5
8

EFFECTIVITY

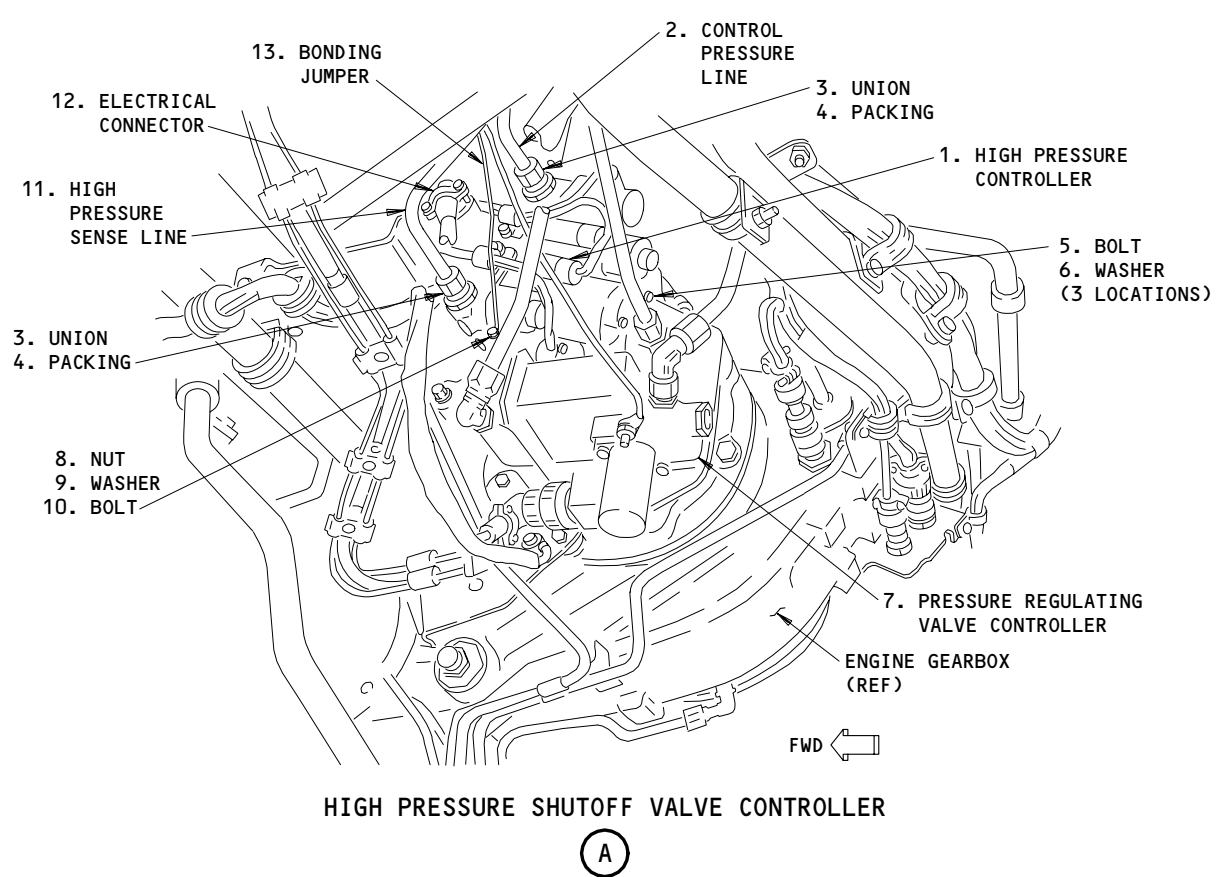
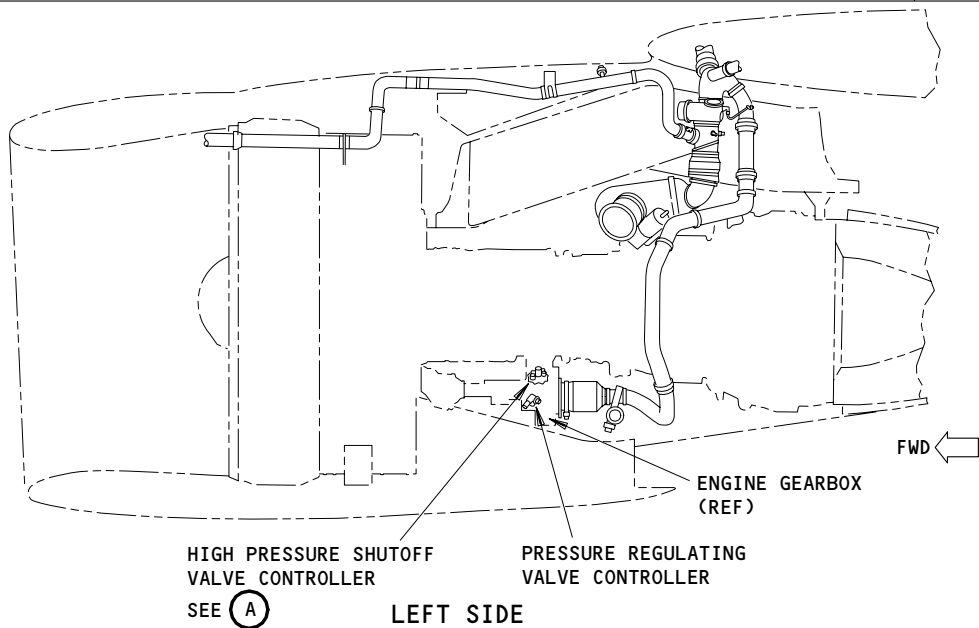
	REPLACE	HIGH PRESSURE CONTROLLER
	36-11-08-4A	36-R02 PAGE 5 OF 6 APR 22/07

SAS



767
TASK CARD

BOEING CARD NO.
36-R02
AIRLINE CARD NO.



HIGH PRESSURE SHUTOFF VALVE CONTROLLER
(A)

High Pressure Controller - Installation
Figure 401

3 8 5 9	EFFECTIVITY	REPLACE	HIGH PRESSURE CONTROLLER
	299919	36-11-08-4A	36-R02
			PAGE 6 OF 6 NOV 10/90

STATION
TAIL NO.
DATE



BOEING CARD NO. 36-R03
AIRLINE CARD NO.

SKILL ENGIN	WORK AREA STRUTS	RELATED TASK	INTERVAL	PHASE	MPD REV 007	TASK CARD REVISION DEC 22/08
TASK REPLACE		TITLE PRESSURE REGULATING & SHUTOFF VALVE		STRUCTURAL ILLUSTRATION REFERENCE	APPLICABILITY AIRPLANE ALL ENGINE ALL	
ZONES 434 444			ACCESS PANELS 434AL 444AL			

MECH	INSP	MPD ITEM NUMBER 36-11-09-2A	
<p>REPLACE THE AIR SUPPLY PRESSURE REGULATING AND SHUTOFF VALVE.</p> <p>THIS CARD IS NOT A SCHEDULED MAINTENANCE TASK. IT IS A COMPONENT CHANGE CARD AND IT IS PROVIDED FOR OPERATOR CONVENIENCE DURING UNSCHEDULED MAINTENANCE ACTIVITIES. SEE APPENDIX A OF THE 767 MAINTENANCE PLANNING DATA (MPD) DOCUMENT, D622T001, FOR A DESCRIPTION OF THE COMPONENT CHANGE CARDS.</p> <p>1. <u>Remove the Air Supply Pressure Regulating and Shutoff Valve (Fig. 201)</u></p> <p>A. References</p> <ul style="list-style-type: none"> (1) 06-41-00/201, Fuselage Access Doors and Panels (2) 06-43-00/201, Engine and Nacelle Strut Access Doors and Panels (3) 24-22-00/201, Electric Power - Control (4) 27-81-00/201, Leading Edge Slats (Activation, Deactivation) (5) 30-21-03/401, Nose Cowl Thermal Anti-Ice Valve (6) 36-00-00/201, Pneumatic - General (7) 36-11-09/201, Pressure Regulating and Shutoff Valve (8) 36-23-00/501, Air Supply BITE System (9) AMM 54-52-01/401, Strut Fairings (10) 71-00-00/201, Power Plant - General (11) 78-31-00/201, Thrust Reverser PRSOV System <p>B. Prepare for the Removal</p>			

3 8 6 0	EFFECTIVITY	REPLACE	PRESSURE REGULATING & SHUTOFF VALVE
		36-11-09-2A	36-R03 PAGE 1 OF 12 DEC 22/08

SAS



767

TASK CARD

BOEING CARD NO. 36-R03
AIRLINE CARD NO.

MECH	INSP

(1) Supply electrical power (Ref 24-22-00).

WARNING: RELEASE THE PRESSURE IN THE PNEUMATIC DUCT BEFORE YOU REMOVE A PNEUMATIC SYSTEM COMPONENT. THE HOT, HIGH-PRESSURE AIR CAN CAUSE INJURY TO PERSONS.

(2) Remove pneumatic power (Ref 36-00-00).

(3) For the removal of the left PRSOV, open these circuit breakers on the overhead circuit breaker panel, P11, and attach DO-NOT-CLOSE tags:

(a) 11S10, LEFT ENG BLEED IND

(b) 11S11, LEFT ENG BLEED CONT

(4) For the removal of the right PRSOV or the air filters, open these circuit breakers on the overhead circuit breaker panel, P11, and attach DO-NOT-CLOSE tags:

(a) 11S19, RIGHT ENG BLEED IND

(b) 11S20, RIGHT ENG BLEED CONT

WARNING: DO THE DEACTIVATION PROCEDURE FOR THE THRUST REVERSER ISOLATION VALVE TO PREVENT THE OPERATION OF THE THRUST REVERSER. THE ACCIDENTAL OPERATION OF THE THRUST REVERSER CAN CAUSE INJURY TO PERSONS OR DAMAGE TO EQUIPMENT.

(5) Do this procedure: Thrust Reverser Isolation Valve Deactivation for the Ground Maintenance (Ref 78-31-00).

WARNING: DO THE DEACTIVATION PROCEDURE FOR THE LEADING EDGE SLATS. THE ACCIDENTAL MOVEMENT OF THE SLATS CAN CAUSE INJURY TO PERSONS AND DAMAGE TO EQUIPMENT.

(6) Do this procedure: leading edge slats deactivation (Ref 27-81-00).

C. Remove the Pressure Regulating and Shutoff Valve (PRSOV) (Fig. 201).

(1) On the engine strut, open the pressure relief door on the left side, 434AL or 444AL (Ref 06-43-00).

3
8
6
1

EFFECTIVITY

REPLACE

36-11-09-2A

PRESSURE REGULATING & SHUTOFF VALVE

36-R03

PAGE 2 OF 12 APR 22/06

MECH	INSP

- (2) Remove the bolts that hold the door hinge panel to the structure.
- (3) Remove the pressure relief door.
- (4) Remove the left thrust reverser fairing access panel 432CL(442CL) (AMM 54-52-01/401) if you need more access to remove the PRSOV.
- (5) Disconnect the electrical connector (12) from the PRSOV (4).
- (6) Disconnect the electrical connector (23) from the overheat switch for the air supply.
- (7) Disconnect the electrical connector (24) from the precooler out temperature bulb.
- (8) Disconnect the wire clamp (20), aft of the left access door.
 - (a) Keep the wire bundle (21) out of the work area.
- (9) Disconnect the PRSOV bonding jumpers (14, 15) from the strut.
- (10) Disconnect the flexible sense line (8) from the union fitting (9).
- (11) Remove the union (9) from the PRSOV (4).
- (12) On the engine strut, open the pressure relief door on the right side 434AR and 444AR (Ref 06-43-00).
- (13) Disconnect the electrical connector (1) from the engine inlet TAI valve (10) (Ref 30-21-03).
- (14) Loosen the downstream pressure sense line (7) at the engine TAI duct (27).
- (15) Disconnect the downstream pressure sense line (7) from the engine TAI valve (10) to give clearance to remove the PRSOV (4).
- (16) Remove the top and lower couplings (5) from the PRSOV (4).
- (17) Remove the electrical connector from the Fan Air Temperature Sensor to get better access for the removal of the PRSOV.
- (18) Loosen the forward and aft couplings (25) for the engine TAI valve (10) from the left side of the engine strut.
 - (a) Do not remove the couplings.

3
8
6
2

EFFECTIVITY

--

REPLACE
36-11-09-2A

PRESSURE REGULATING & SHUTOFF VALVE
36-R03
PAGE 3 OF 12 APR 22/06

MECH	INSP
------	------

- (19) Turn and move the engine TAI valve and the couplings out of the work area (Ref 30-21-03).
- (20) If you can not move the engine inlet TAI valve, remove the engine inlet TAI valve from the duct (Ref 30-21-03).
- (21) If it is necessary to move the duct on each side of the PRSOV to help you remove the PRSOV, do these steps to get better access:
 - (a) Remove the upper leading edge access panel, 511PT or 611PT (AMM 06-44-00/201).
 - (b) Remove the coupling (32) for the starter duct (33).
 - (c) Remove the coupling (36) for the leading edge wing air supply duct (34).
 - (d) If necessary, disconnect one end of the two rod assemblies assemblies (35).
 - (e) From the upper wing panel, have one person pull the strut pneumatic duct (31) slightly up.

CAUTION: BE CAREFUL WHEN YOU MOVE THE PRSOV. INCORRECT MOVEMENT CAN CAUSE DAMAGE TO EQUIPMENT.

- (22) Carefully move the PRSOV (4) to get access to the top and lower seals (6).
- (23) Remove the top and lower seals (6).
- (24) Align the PRSOV with the duct.
- (25) Turn the PRSOV approximately 180 degrees from the original installed position.
- (26) Carefully remove the PRSOV (4) from between the duct flanges.

CAUTION: THE TEMPERATURE PROBE IS IN THE VALVE BODY. DO NOT USE THE TEMPERATURE PROBE AS A HANDLE WHEN YOU MOVE THE PRSOV. HEAVY LOADS ON THE TEMPERATURE PROBE CAN CAUSE DAMAGE TO THE PROBE.

3
8
6
3

EFFECTIVITY	REPLACE	PRESSURE REGULATING & SHUTOFF VALVE
	36-11-09-2A	36-R03
		PAGE 4 OF 12 DEC 22/08

MECH INSP

- (27) Carefully remove the PRSOV through the access door.
 - (a) Remove the valve body first.
- (28) Put a cover on the duct holes to keep out unwanted objects.

2. Install the Pressure Regulating and Shutoff Valve (PRSOV) (Fig. 201)

A. Consumable Materials

- (1) D01062, Never-Seez, Pure Nickel Special, NSBT-8N (High temperature antiseize compound)

B. Parts

AMM		NOMENCLATURE	AIPC		
FIG	ITEM		SUBJECT	FIG	ITEM
201	4	Pressure Regulating Shutoff Valve	36-11-09	03	215
201	6	Seal	36-11-01	01	95
201	11	Packing	36-11-16	03	115
201	11	Packing	36-12-02	02	72

C. References

- (1) 06-41-00/201, Fuselage Access Doors and Panels
- (2) 06-43-00/201, Engine and Nacelle Strut Access Doors and Panels
- (3) 24-22-00/201, Electric Power - Control
- (4) 27-81-00/201, Leading Edge Slats (Activation, Deactivation)
- (5) 30-21-03/401, Nose Cowl Thermal Anti-Ice Valve
- (6) 36-00-00/201, Pneumatic - General
- (7) 36-11-09/201, Pressure Regulating and Shutoff Valve
- (8) 36-23-00/501, Air Supply BITE System
- (9) AMM 54-52-01/401, Strut Fairings

EFFECTIVITY

REPLACE

PRESSURE REGULATING & SHUTOFF VALVE

36-11-09-2A

36-R03

PAGE 5 OF 12 DEC 22/08

3
8
6
4

MECH	INSP

(10) 71-00-00/201, Power Plant - General

(11) 78-31-00/201, Thrust Reverser PRSOV System

D. Procedure

(1) Remove the duct covers.

CAUTION: THE TEMPERATURE PROBE IS IN THE VALVE BODY. DO NOT USE THE TEMPERATURE PROBE AS A HANDLE WHEN YOU MOVE THE PRSOV. HEAVY LOADS ON THE TEMPERATURE PROBE CAN CAUSE DAMAGE TO THE PROBE.

(2) Put the PRSOV (4) into the access door opening.

(a) Put the actuator end in first.

(3) From the right side of the strut, push down on the lower pneumatic duct and/or pull up on the upper strut pneumatic duct (31).

(4) Carefully install the PRSOV (4) valve body between the higher and lower ducts.

(5) Turn the PRSOV (4) approximately 100 degrees toward the final installed position.

(6) Apply antiseize compound to all of the sense line fittings.

(7) Install the union (9) with the nut (10) and the new packing (11).

(8) Turn the PRSOV (4) 80 degrees until the sense line for the downstream pressure (8) aligns with the PRSOV connection.

(9) Carefully move the PRSOV (4) to get access to install the E-seals at each PRSOV flange.

(10) Examine all the E-seals.

(a) Make sure the E-seals do not have cracks, dents, unwanted material or other damage.

(b) Replace all the damaged E-seals.

(c) Install the E-seal at each PRSOV flange.

3
8
6
5

EFFECTIVITY

--

REPLACE
36-11-09-2A

PRESSURE REGULATING & SHUTOFF VALVE
36-R03
PAGE 6 OF 12 DEC 22/08

MECH	INSP

(11) Align the PRSOV (4) with the pneumatic ducts.

CAUTION: MAKE SURE YOU INSTALL THE LOCKING DEVICE OF THE COUPLING CORRECTLY AS SHOWN IN FIGURE 201. IF YOU DO NOT INSTALL THE COUPLING FINGERS INSIDE THE LOCKING DEVICE THE COUPLING CAN LOOSEN AND CAUSE DAMAGE TO EQUIPMENT.

(12) Install the higher and lower duct couplings (5) on the PRSOV (4).

(a) Do not tighten the couplings (5).

(13) If necessary, install the coupling (32) for the starter duct (33).

(14) If necessary, install the coupling (36) for the wing leading edge air supply duct (34).

(15) If necessary, connect the two rod assemblies (35).

(16) Connect the pressure sense line (8) to the union (9).

(17) Connect the top (15) and the bottom (14) bonding jumpers to the strut with the screws (1), washers (2), and nuts (3).

(a) Tighten the screws (1) and nuts (3).

(18) Install the electrical connector for the Fan Air Temperature Sensor.

(19) Put the engine inlet TAI Valve into its position or install the engine inlet TAI valve (Ref 30-21-03).

(20) Connect the downstream pressure sense line (7) to the engine inlet TAI valve (10).

(21) Connect the downstream pressure sense line (7) to the engine inlet TAI valve duct (27).

(22) Connect the electrical connector (1) to the engine inlet TAI valve (10).

(23) Tighten the TAI valve couplings.

(24) Install the clamp (20) to the strut ceiling with the screw (17), washer (18), and nut (19).

(a) Tighten the screw (17) and nut (19).

3
8
6
6

EFFECTIVITY

--

REPLACE
36-11-09-2A

PRESSURE REGULATING & SHUTOFF VALVE
36-R03
PAGE 7 OF 12 DEC 22/08

MECH	INSP

(25) Install the electrical connector (12) on the PRSOV (4).

(26) Install the electrical connector (23) for the overheat switch.

(27) Install the electrical connector (24) for the precooler out temperature bulb.

CAUTION: DO NOT TIGHTEN THE COUPLINGS MORE THAN THE SPECIFIED LIMIT. IF YOU APPLY TOO MUCH TORQUE, THE VALVE FLOW BODY CAN WARP (BECOME OVAL) AND CAUSE THE VALVE TO BIND DURING OPERATION.

(28) Tighten the PRSOV upper and lower couplings (5) to 115-125 pound-inches (13.0-14.1 newton-meters).

(29) For the installation of the left PRSOV remove the DO-NOT-CLOSE tags and close these circuit breakers on the P11 panel:

(a) 11S10, LEFT ENG BLEED IND

(b) 11S11, ENG BLEED CONT

(30) For the installation of the right PRSOV remove the DO-NOT-CLOSE tags and close these circuit breakers on the P11 panel:

(a) 11S19, RIGHT ENGINE BLEED IND

(b) 11S20, RIGHT ENG BLEED CONT

(31) Do a Test of the PRSOV

(a) Push the L or R ANTI-ICE ENGINE switch-light on the pilot's overhead panel, P5, to the off position.

1) Make sure the ON light is off.

(b) To do a test of the right PRSOV, push the L ISLN and R ISLN valve switch-light on the P5 panel to the open position. Make sure the white bar lights come on.

NOTE: You must open the left and right isolation valves to allow air to reach the right PRSOV during the test of the right PRSOV. It is not necessary to open the isolation valves for a test of the left PRSOV.

3
8
6
7

EFFECTIVITY

REPLACE

36-11-09-2A

PRESSURE REGULATING & SHUTOFF VALVE

36-R03

PAGE 8 OF 12 DEC 22/08

MECH	INSP

- (c) Make sure the high pressure shutoff valve (HPSOV) is in the full closed position.
 - 1) If the HPSOV is not closed, turn the manual override nut (16) to the full closed position.
- (d) Pressurize the pneumatic system upstream of the PRSOV (Ref 36-11-09).
- (e) Do a Test of the PRSOV flanges for air leakage:
 - 1) Small air leakage is satisfactory.
 - 2) Repair large air leakage with joint or clamp adjustment.
- (f) Put the PRSOV Back to Its Usual Condition (Ref 36-11-09).
- (g) Do the air supply BITE test (Ref 36-23-00).

E. Put the Airplane Back to Its Usual Condition

- (1) Install the left thrust reverser fairing access panel 432CL(442CL) (AMM 54-52-01/401) if it was removed for access to the PRSOV.
- (2) Install the left strut pressure relief door and the door hinge plate with the bolts, washers, and nuts.
 - (a) Tighten the nuts and bolts.
- (3) Close the left strut pressure relief door 434AL(444AL).
- (4) Close the right strut pressure relief door 434AR(444AR).
- (5) If necessary, install the upper leading edge access panel, 511PT or 611PT (AMM 06-44-00/201).
- (6) Do this procedure: Leading Edge Slats Activation (AMM 27-81-00/201).
- (7) Do this procedure: Thrust Reverser Isolation Valve Activation (Ref 78-31-00).
- (8) Remove electrical power if it is not necessary (Ref 24-22-00).

3
8
6
8

EFFECTIVITY

--

REPLACE
36-11-09-2A

PRESSURE REGULATING & SHUTOFF VALVE
36-R03 PAGE 9 OF 12 DEC 22/08

SAS



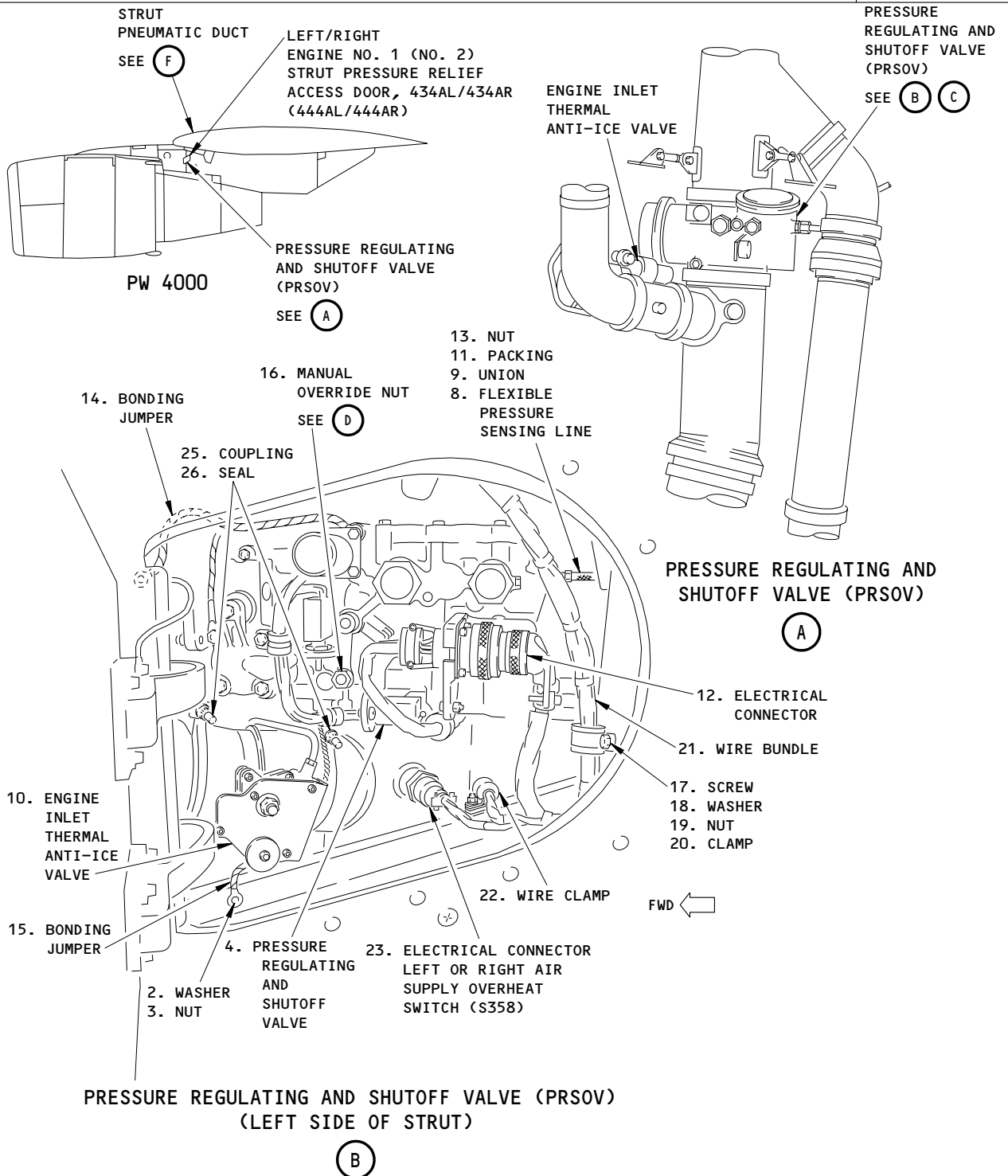
767

TASK CARD

BOEING CARD NO.

36-R03

AIRLINE CARD NO.



Air Supply Pressure Regulating and Shutoff Valve - Maintenance Practices Figure 201 (Sheet 1)

3
8
6
9

EFFECTIVITY

823716

REPLACE

36-11-09-2A

PRESSURE REGULATING & SHUTOFF VALVE

36-R03

PAGE 10 OF 12 DEC 22/08

SAS



767

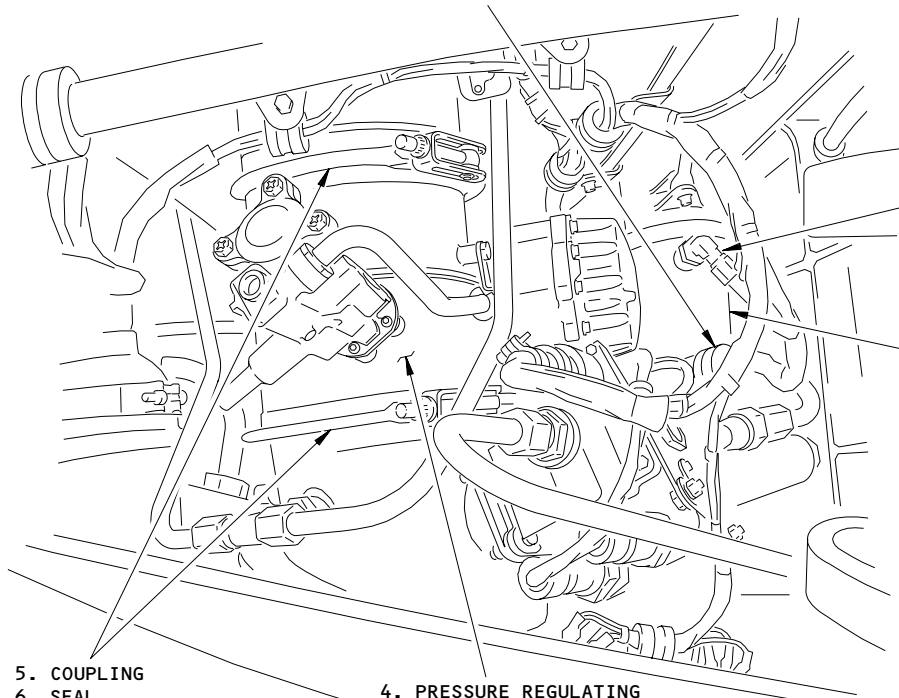
TASK CARD

BOEING CARD NO.

36-R03

AIRLINE CARD NO.

1. ENGINE INLET THERMAL ANTI-ICE VALVE ELECTRICAL CONNECTOR



7. DOWNSTREAM PRESSURE SENSE LINE

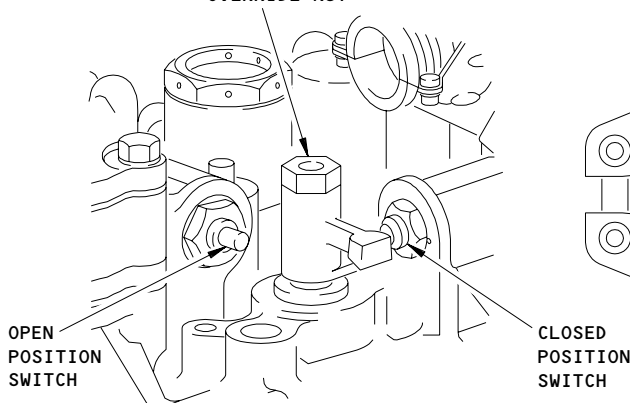
27. ENGINE INLET THERMAL ANTI-ICE DUCT

5. COUPLING
6. SEAL
SEE (E)

4. PRESSURE REGULATING AND SHUTOFF VALVE

PRESSURE REGULATING AND SHUTOFF VALVE (PRSOV) (RIGHT SIDE OF STRUT)

16. MANUAL OVERRIDE NUT



OPEN POSITION SWITCH

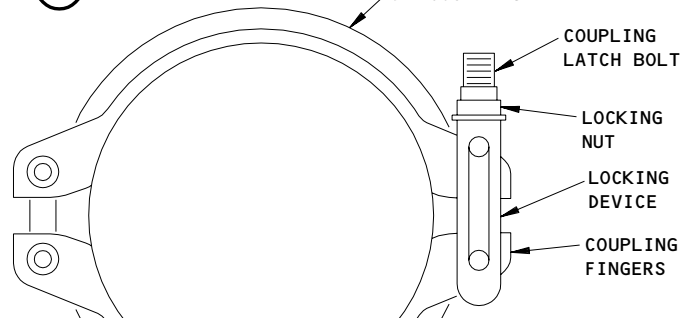
CLOSED POSITION SWITCH

MANUAL OVERRIDE NUT

(D)

(C)

5. COUPLING



COUPLING LATCH BOLT
LOCKING NUT
LOCKING DEVICE
COUPLING FINGERS

COUPLING

(E)

Air Supply Pressure Regulating and Shutoff Valve - Maintenance Practices Figure 201 (Sheet 2)

3
8
7
0

EFFECTIVITY

777146

REPLACE

36-11-09-2A

PRESSURE REGULATING & SHUTOFF VALVE

36-R03

PAGE 11 OF 12 DEC 22/08

SAS



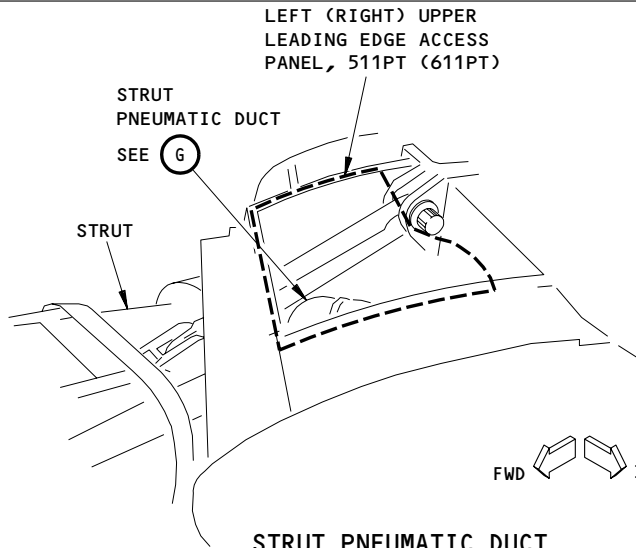
767

TASK CARD

BOEING CARD NO.

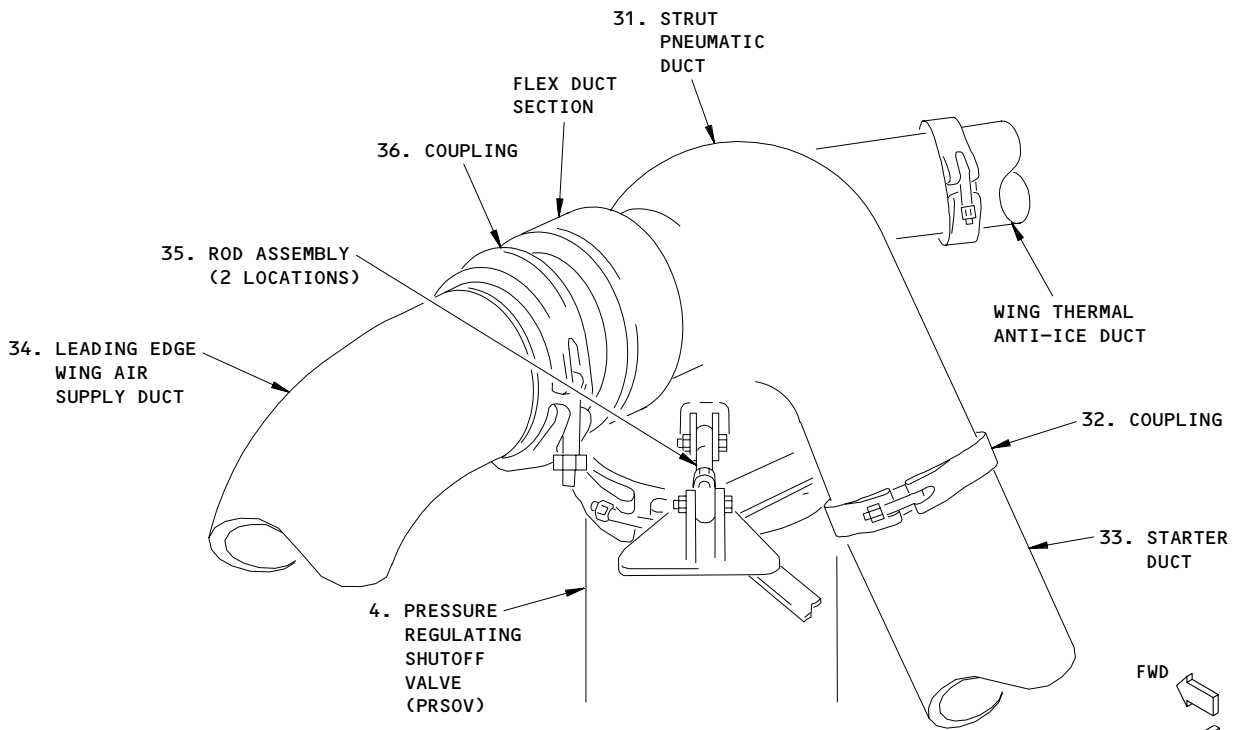
36-R03

AIRLINE CARD NO.



STRUT PNEUMATIC DUCT

(F)



STRUT PNEUMATIC DUCT (RIGHT SIDE STRUT SHOWN, LEFT SIDE IS EQUIVALENT)

(G)

Air Supply Pressure Regulating and Shutoff Valve (PRSOV) - Maintenance Practices Figure 201 (Sheet 3)

3
8
7
1

EFFECTIVITY

1697238

REPLACE

36-11-09-2A

PRESSURE REGULATING & SHUTOFF VALVE

36-R03

PAGE 12 OF 12 DEC 22/08

STATION
TAIL NO.
DATE



BOEING CARD NO. 36-R04
AIRLINE CARD NO.

SKILL ENGIN	WORK AREA ENGIN/STRUT	RELATED TASK	INTERVAL	PHASE	MPD REV 006	TASK CARD REVISION APR 22/08
TASK REPLACE		TITLE HIGH PRESSURE SHUTOFF VALVE		STRUCTURAL ILLUSTRATION REFERENCE	APPLICABILITY AIRPLANE ENGINE ALL 4000	
ZONES 410 420			ACCESS PANELS 415AL 425AL			

MECH	INSP	MPD ITEM NUMBER 36-11-07-4A	
<p>REPLACE THE HIGH PRESSURE SHUTOFF VALVE.</p> <p>THIS CARD IS NOT A SCHEDULED MAINTENANCE TASK. IT IS A COMPONENT CHANGE CARD AND IT IS PROVIDED FOR OPERATOR CONVENIENCE DURING UNSCHEDULED MAINTENANCE ACTIVITIES. SEE APPENDIX A OF THE 767 MAINTENANCE PLANNING DATA (MPD) DOCUMENT, D622T001, FOR A DESCRIPTION OF THE COMPONENT CHANGE CARDS.</p> <p>1. <u>Remove High Pressure Shutoff Valve</u> (Fig. 401)</p> <p>A. References</p> <ul style="list-style-type: none"> (1) AMM 24-22-00/201, Electrical Power - Control (2) AMM 36-00-00/201, Pneumatic - General (3) AMM 36-11-01/401, Pneumatic Duct (4) AMM 36-11-09/201, Air Supply Pressure Regulating and Shutoff Valve (5) AMM 36-23-00/501, Air Supply BITE System (6) AMM 71-00-00/201, Power Plant (Operating Procedure) (7) AMM 78-31-00/201, Engine Fan Thrust Reverser <p>B. Procedure to remove the high pressure shutoff valve.</p> <p>WARNING: RELEASE THE PRESSURE IN THE PNEUMATIC DUCT BEFORE YOU REMOVE A PNEUMATIC SYSTEM COMPONENT. THE HOT, HIGH-PRESSURE AIR CAN CAUSE INJURY TO PERSONS.</p> <p>(1) Remove the pneumatic power (AMM 36-00-00/201).</p>			

3 8 7 2	EFFECTIVITY	REPLACE	HIGH PRESSURE SHUTOFF VALVE
		36-11-07-4A	36-R04 PAGE 1 OF 16 DEC 22/01

MECH	INSP

- (2) If electrical power is supplied to the airplane, open these circuit breakers on the overhead circuit breaker panel P11 and attach DO-NOT-CLOSE tags:
 - (a) For the removal of the left high pressure (HP) shutoff valve:
 - 1) 11S10, LEFT ENG BLEED IND
 - 2) 11S11, LEFT ENG BLEED CONT
 - (b) For the removal of right high pressure (HP) shutoff valve:
 - 1) 11S19, RIGHT ENG BLEED IND
 - 2) 11S20, RIGHT ENG BLEED CONT
 - (3) If electrical power is supplied to the airplane, open this circuit breaker on the left misc equip panel P36 and attach DO-NOT-CLOSE tag:
 - (a) 36L7 or 36K7, AIR SUPPLY BITE
- WARNING:** DO THE THRUST REVERSER DEACTIVATION PROCEDURE TO PREVENT THE OPERATION OF THE THRUST REVERSER. ACCIDENTAL OPERATION OF THE THRUST REVERSER CAN CAUSE INJURY TO PERSONS OR DAMAGE TO EQUIPMENT.
- (4) Do the thrust reverser deactivation for ground maintenance (AMM 78-31-00/201).
- WARNING:** OBEY THE INSTRUCTIONS IN AMM 78-31-00/201 WHEN YOU OPEN THE THRUST REVERSERS. IF YOU DO NOT OBEY THE INSTRUCTIONS, INJURY TO PERSONS OR DAMAGE TO EQUIPMENT COULD OCCUR.
- (5) Open the applicable left thrust reverser (AMM 78-31-00/201).
 - (6) Remove the screw (13), washer (14) and nut (15) and disconnect the bonding jumper (12) from the HPSOV (1).
 - (7) Disconnect the electrical wiring from the HPSOV terminal block.
 - (a) Put tags on the electrical wires to identify their correct position for the installation.

3
8
7
3

EFFECTIVITY

	REPLACE	HIGH PRESSURE SHUTOFF VALVE
	36-11-07-4A	36-R04 PAGE 2 OF 16 APR 22/08

MECH	INSP

- (8) AIRPLANES WITH HPSOV POST-SB 36-53;
AIRPLANES WITH HPSOV P/N S210T120-141 (PRR B12745);
Disconnect the electrical wiring connected to the HPSOV actuator and HPSOV heatshield:
 - (a) Remove the nut (22) and washer (21) that hold the P-clamp (23) to the support clamp (20) on the HPSOV actuator.
 - (b) Remove the P-clamp (23) and wiring from the support clamp (20) on the HPSOV actuator.
 - 1) Re-install the washer (21) and nut (22) to keep the three spacers (24) attached to the support clamp (20).
 - (c) Loosen and remove the support clamp (20) from the HPSOV actuator and keep for subsequent installation.
 - (d) Cut the lockwire and remove the screw (27) and washer (26) to disconnect the P-clamp (28) and wiring from the valve heatshield (29).
 - 1) Re-install the washer (26) and screw (27) to the valve heatshield (29).
- (9) Disconnect the control pressure line (3) from the elbow (4) at the HPSOV actuator.
 - (a) Remove the elbow (4), union (5) and packing (6) from HPSOV.
 - (b) Discard the packing (6).
 - (c) Put a cover in the opening in control pressure line (3) to prevent entry of unwanted material.
- (10) Remove the couplings (10) from the HPSOV (1) and remove the HPSOV from the engine.
 - (a) Keep the couplings (10) for the installation of the HPSOV (1).
 - (b) If you cannot easily remove the HPSOV because it is too tight, loosen one of the duct sections (2) or (8) on either side of the HPSOV (AMM 36-11-01/401).
- (11) Remove the E-Seals (11) from the duct flanges.
- (12) Put a cover in the duct openings to prevent entry of unwanted material.

3
8
7
4

EFFECTIVITY

	REPLACE	HIGH PRESSURE SHUTOFF VALVE
	36-11-07-4A	36-R04 PAGE 3 OF 16 APR 22/08

MECH INSP

2. Install High Pressure Shutoff Valve (Fig. 401)

A. Consumable Materials

- (1) G00095 Detector - Leak-Tek 160X
- (2) D01062, Never-Seez, Pure Nickel Special, NSBT-8N (High temperature antiseize compound)
- (3) G00145, Tape - Permacel P-421 (or P-440)

B. Parts

AMM		NOMENCLATURE	AIPC		
FIG	ITEM		SUBJECT	FIG	ITEM
401	1	High Pressure Shutoff Valve	36-11-01	05	375
401	1	High Pressure Shutoff Valve	36-11-01	11	455
401	1	High Pressure Shutoff Valve	36-11-01	11A	515
401	6	Packing	36-11-08	06	355
401	6	Packing	36-11-08	07	370
401	6	Packing	36-12-51	08A	210
401	11	E-Seal	36-11-01	05	55
401	11	E-Seal	36-11-01	11	95
401	11	E-Seal	36-11-01	11A	90

C. References

- (1) AMM 20-10-21/601, Electrical Bonding
- (2) AMM 24-22-00/201, Electrical Power - Control
- (3) AMM 36-00-00/201, Pneumatic - General
- (4) AMM 36-11-01/401, Pneumatic Duct
- (5) AMM 36-11-09/201, Air Supply Pressure Regulating and Shutoff Valve
- (6) AMM 36-23-00/501, Air Supply BITE System
- (7) AMM 71-00-00/201, Power Plant (Operating Procedure)
- (8) AMM 78-31-00/201, Engine Fan Thrust Reverser

EFFECTIVITY

REPLACE

HIGH PRESSURE SHUTOFF VALVE

36-11-07-4A

36-R04

PAGE 4 OF 16 APR 22/08

3
8
7
5

MECH	INSP

- (9) SWPM 20-20-00, Electrical Bonds and Grounds
- D. Procedure to install a high pressure shutoff valve.
 - (1) Remove the duct covers.
 - (2) Inspect the HPSOV (1) for the damage.
- CAUTION:** THE VALVE E-SEALS ARE EASILY DAMAGED. THE INSTALLATION OF DAMAGED E-SEALS WILL CAUSE TOO MUCH LEAKAGE.
- (3) Examine all the E-seals (11).
 - (a) The E-seals (11) must be free of any cracks, dents, or other damage.
 - (b) Replace all the damaged E-seals (11).
- (4) Put the E-seals (11) in the HPSOV (1) flanges.
- CAUTION:** MAKE SURE YOU INSTALL THE LOCKING DEVICE OF THE COUPLING CORRECTLY AS SHOWN IN FIGURE 401. IF YOU DO NOT INSTALL THE COUPLING FINGERS INSIDE THE LOCKING DEVICE THE COUPLING CAN LOOSEN AND CAUSE DAMAGE TO EQUIPMENT.
- (5) Put the HPSOV (1) between the High Pressure duct (8) and the HP/IP manifold (2).
 - (a) If you cannot easily install the HPSOV because it is too tight, loosen one of the duct sections (2) or (8) on either side of the HPSOV (AMM 36-11-01/401).
- CAUTION:** MAKE SURE YOU INSTALL THE LOCKING DEVICE OF THE COUPLING CORRECTLY AS SHOWN IN FIGURE 401. IF YOU DO NOT INSTALL THE COUPLING FINGERS INSIDE THE LOCKING DEVICE THE COUPLING CAN LOOSEN AND CAUSE DAMAGE TO EQUIPMENT.
- (6) Loosely install the couplings (10).
- (7) Adjust the valve position in the duct to align with the control pressure line (3).

3
8
7
6

EFFECTIVITY

	REPLACE	HIGH PRESSURE SHUTOFF VALVE
	36-11-07-4A	36-R04 PAGE 5 OF 16 APR 22/08

MECH	INSP

NOTE: Make sure you align the joints of the duct and HPSOV correctly before you tighten the couplings. The duct and HPSOV flanges will not automatically align themselves when you tighten the couplings. Do a check of the joints after you tighten the couplings.

CAUTION: DO NOT TIGHTEN THE COUPLINGS MORE THAN THE SPECIFIED LIMIT. IF YOU APPLY TOO MUCH TORQUE, THE VALVE FLOW BODY CAN WARP (BECOME OVAL) AND CAUSE THE VALVE TO BIND DURING OPERATION.

- (8) Tighten the couplings (10) to 120 pound-inches (13.56 newton-meters).
 - (9) Apply a light coat of antiseize compound to the threads of the control pressure line (3), elbow (4) and union (5).
 - (10) Install the new packing (6), union (5) and the elbow (4) to the HPSOV (1).
 - (11) Connect the control pressure line (3) to the elbow (4).
 - (12) Install the bonding jumper (15) to the HPSOV (1) with the screw (13), washer (14) and nut (15).
 - (a) Make sure the position of the ground tab for the bonding jumper will not interfere with the movement of the position indicator lever.
 - (b) Measure the electrical resistance between the ground tab and the bonding jumper and make sure it is less than 0.005 ohms (AMM 20-10-21/601 and SWPM 20-20-00).
 - (13) Install the electrical wiring at the correct positions on the HPSOV terminal block.
 - (a) Make sure you install the terminal lug barrel in the up position.
 - (b) Install the two washers (17) and a nut (16) at each terminal on the HPSOV terminal block.
- 1) Tighten the nuts (16) to 15-20 pound-inches (1.69-2.26 newton-meters)

3
8
7
7

EFFECTIVITY	REPLACE	HIGH PRESSURE SHUTOFF VALVE
-------------	---------	-----------------------------

MECH	INSP

- (c) Remove the tags from the electrical wiring.
- (14) AIRPLANES WITH HPSOV POST-SB 36-53;
AIRPLANES WITH HPSOV P/N S210T120-141 (PRR B12745);
Attach the electrical wiring to the valve heatshield on the HPSOV actuator.
 - (a) Remove and discard the old tape under the P-clamp (28) and around the HPSOV wiring, then replace with 2-4 layers of new Permacel tape P-421 (or P-440).
 - (b) Install the P-clamp (28) to the valve heatshield with the washer (26) and screw (27).
 - 1) Tighten the screw (27) to a torque of 25-30 pound-inches (2.8-3.4 Newton-meters) above running torque, then install a new lockwire to the screw (27).
 - (c) Install the support clamp (20) around the HPSOV actuator.
 - 1) Adjust the support clamp to permit connection of the P-clamp (23).
 - 2) Attach the P-clamp (23) to the support clamp (20) with the three spacers (24), washer (21) and nut (22).
 - 3) Tighten the support clamp (20) to a torque of 30-40 pound-inches (3.4-4.5 Newton-meters).
- (15) If it is necessary, tighten any loose duct sections (AMM 36-11-01/401).
- (16) Remove the DO-NOT-CLOSE tags and close these circuit breakers on the P11 panel:
 - (a) For the installation of left high pressure shutoff valve:
 - 1) 11S10, LEFT ENG BLEED IND
 - 2) 11S11, LEFT ENG BLEED CONT
 - (b) For the installation of the right high pressure shutoff valve:
 - 1) 11S19, RIGHT ENG BLEED IND
 - 2) 11S20, RIGHT ENG BLEED CONT

3
8
7
8

EFFECTIVITY



REPLACE	HIGH PRESSURE SHUTOFF VALVE
36-11-07-4A	36-R04 PAGE 7 OF 16 APR 22/08

SAS



767

TASK CARD

BOEING CARD NO. 36-R04
AIRLINE CARD NO.

MECH	INSP
------	------

(17) Remove D0-NOT-CLOSE tags and close this circuit breaker on the P36 panel:

(a) 36L7 or 36K7, AIR SUPPLY BITE

E. HPSOV Installation Test

(1) Do these steps for a test of the HPSOV (1) installation.

(a) Supply electrical power (AMM 24-22-00/201).

(b) Do a test of the valve flanges for leakage (preferred method):

NOTE: This method will examine the upstream and downstream flanges of the valve.

1) Push the applicable (L/R) ENG OFF switch-light on the air supply control module (on P5 panel) to the on position.

2) Apply a leak detector to the flanges of the valve.

3) With the thrust reverser open, dry motor the engine (AMM 71-00-00/201).

4) Examine the flanges of valve for the leakage.

a) Slow movement of bubbles is permitted.

b) Repair fast movement of bubbles or strong leakage by joint or clamp alignment.

5) Stop the engine (AMM 71-00-00/201).

(c) Do a test of valve flanges for the leakage (optional method):

NOTE: This method will examine only the downstream flange of the valve.

1) Push the applicable L or R ANTI-ICE ENGINE switch-light on the pilot's overhead P5 panel to off position. Make sure the ON light is off.

3
8
7
9

EFFECTIVITY



REPLACE

HIGH PRESSURE SHUTOFF VALVE

36-11-07-4A

36-R04

PAGE 8 OF 16 APR 22/08

MECH	INSP

- 2) To do a test of the right high pressure shutoff valve, push the L ISLN and R ISLN valve switch-light on P5 panel to the open position. Make sure the white bar lights come on.
 - 3) Do a check of the valve position to make sure the high pressure shutoff valve is in full closed position.
 - a) If not closed, turn the valve manual drive hex (7) until position indicator (9) is in the closed position.
 - 4) Pressurize pneumatic duct upstream of PRSOV (AMM 36-11-09/201).
 - 5) Examine the downstream flange of valve for leakage.
 - a) Apply leak detector to the downstream flange of the valve.
 - b) Slow movement of bubbles is permitted.
 - c) Repair fast movement of bubbles or strong leakage by joint or clamp alignment.
 - 6) Remove the pneumatic pressure upstream of PRSOV (AMM 36-11-09/201).
 - (d) Do the Air Supply System BITE Check (AMM 36-23-00/501).

NOTE: System BITE check verifies electrical operation of high pressure shutoff valve

 - (e) Push and release RESET button on the BITE module.
 - (2) Put the airplane back to its usual condition.
- WARNING:** OBEY THE INSTRUCTIONS IN AMM 78-31-00/201 WHEN YOU CLOSE THE THRUST REVERSERS. IF YOU DO NOT OBEY THE INSTRUCTIONS, INJURY TO PERSONS OR DAMAGE TO EQUIPMENT COULD OCCUR.
- (a) Close the applicable right thrust reverser (AMM 78-31-00/201).
 - (3) Do the thrust reverser activation (AMM 78-31-00/201).

3
8
8
0

EFFECTIVITY	REPLACE	HIGH PRESSURE SHUTOFF VALVE
	36-11-07-4A	36-R04
		PAGE 9 OF 16 APR 22/08

SAS



767

TASK CARD

BOEING CARD NO.

36-R04

AIRLINE CARD NO.

MECH INSP

(a) Remove electrical power if it is not necessary.

3
8
8
1

EFFECTIVITY

REPLACE

HIGH PRESSURE SHUTOFF VALVE

36-11-07-4A

36-R04

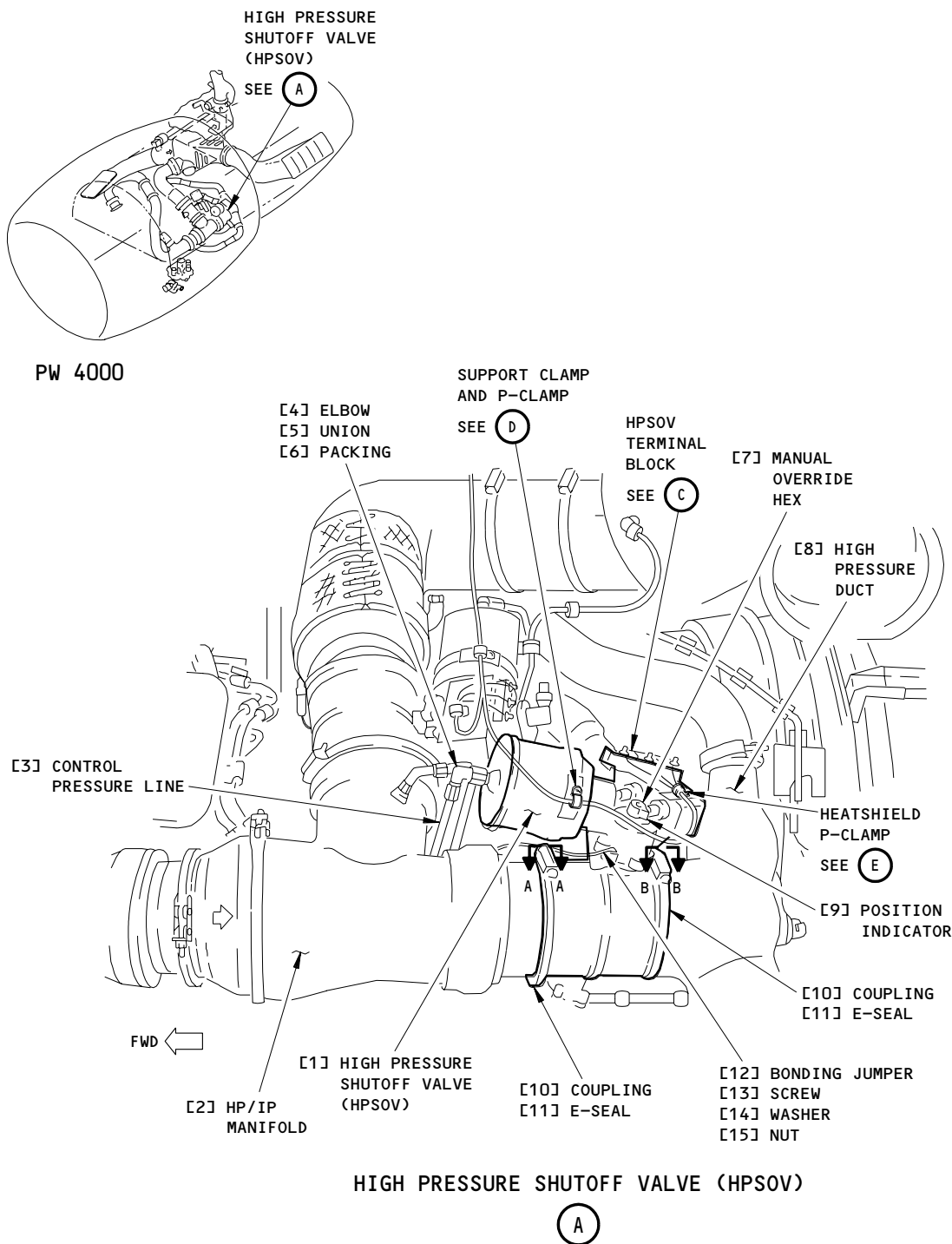
PAGE 10 OF 16 APR 22/08

SAS



767

TASK CARD



High Pressure Shutoff Valve Installation
Figure 401 (Sheet 1)

3
8
8
2

EFFECTIVITY

AIRPLANES WITH HPSOV POST-SB 36-53;

K9969

REPLACE

36-11-07-4A

HIGH PRESSURE SHUTOFF VALVE

36-R04

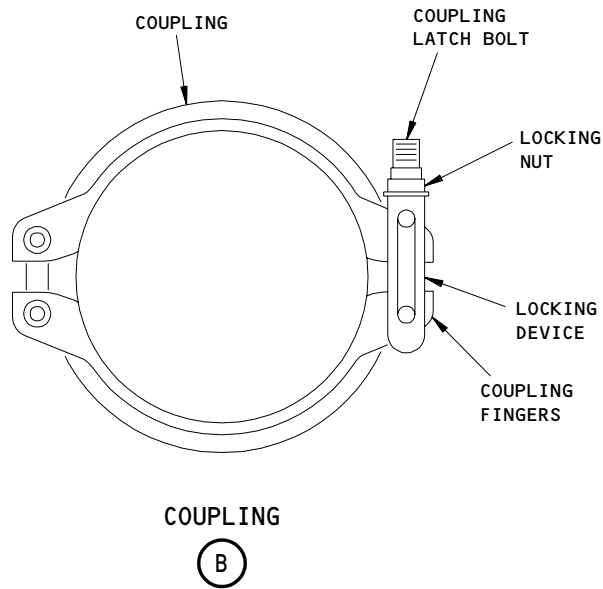
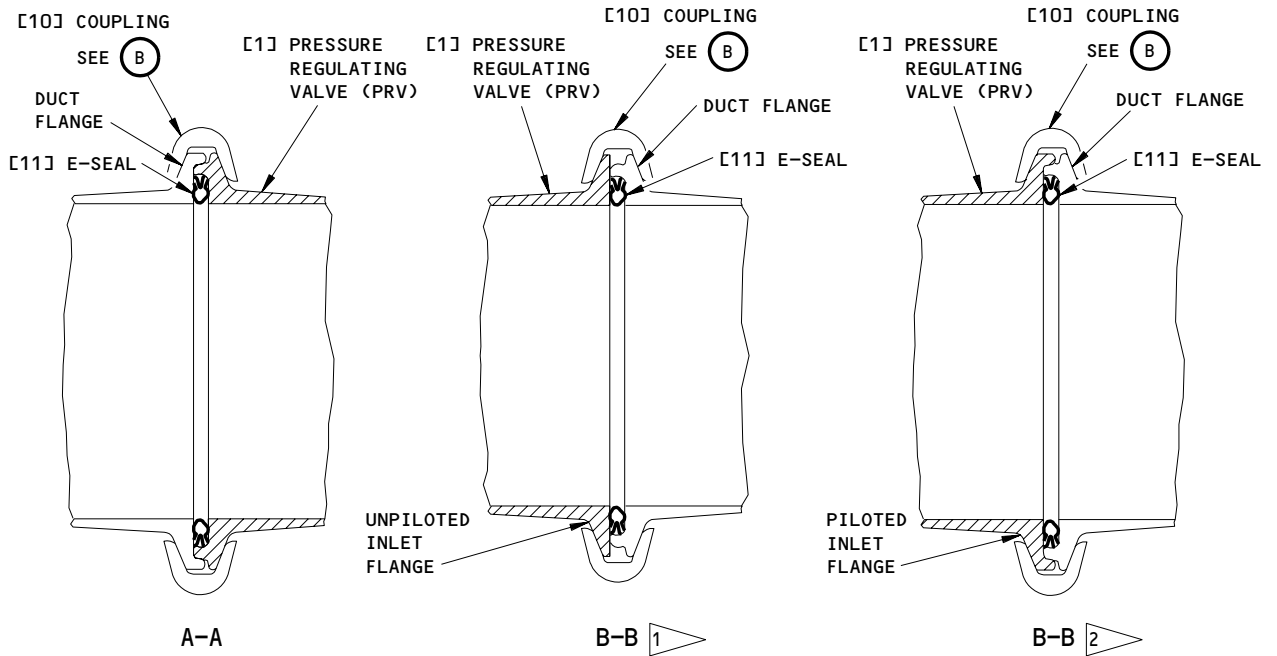
PAGE 11 OF 16 APR 22/08

SAS



TASK CARD

BOEING CARD NO. 36-R04
AIRLINE CARD NO.



- 1 PRV WITH UNPILOTED INLET FLANGE
- 2 PRV WITH PILOTED INLET FLANGE

High Pressure Shutoff Valve Installation
Figure 401 (Sheet 2)

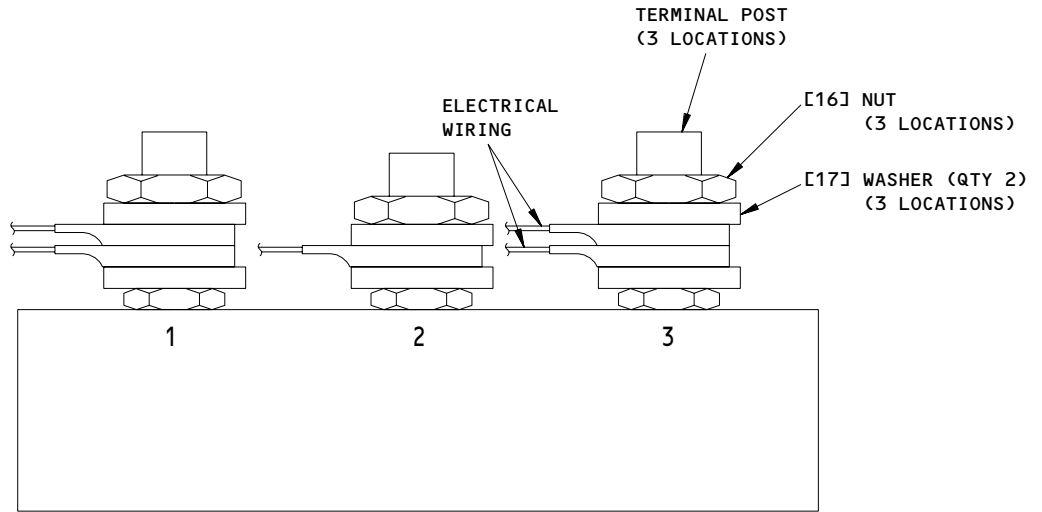
3 8 8 3	EFFECTIVITY	REPLACE	HIGH PRESSURE SHUTOFF VALVE
	AIRPLANES WITH HPSOV POST-SB 36-53;	36-11-07-4A	36-R04
	L7458		PAGE 12 OF 16 APR 22/08

SAS



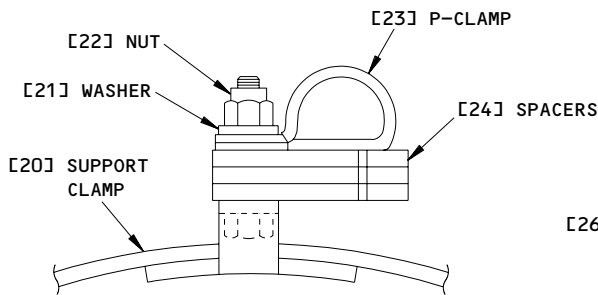
767
TASK CARD

BOEING CARD NO. 36-R04
AIRLINE CARD NO.



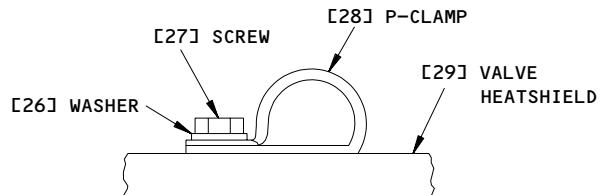
HPSOV TERMINAL BLOCK

(C)



SUPPORT CLAMP AND P-CLAMP

(D)



HEATSHIELD P-CLAMP

(E)

High Pressure Shutoff Valve Installation
Figure 401 (Sheet 3)

3
8
8
4

EFFECTIVITY

IRPLANES WITH HPSOV POST-SB 36-53;

M34686

REPLACE

36-11-07-4A

HIGH PRESSURE SHUTOFF VALVE

36-R04

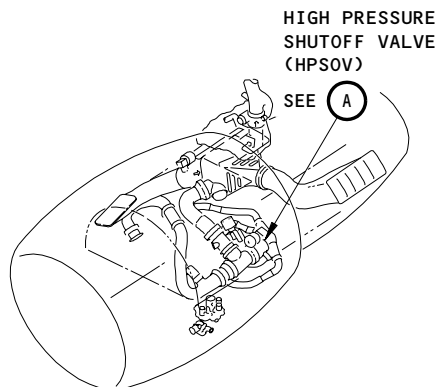
PAGE 13 OF 16 APR 22/08

SAS

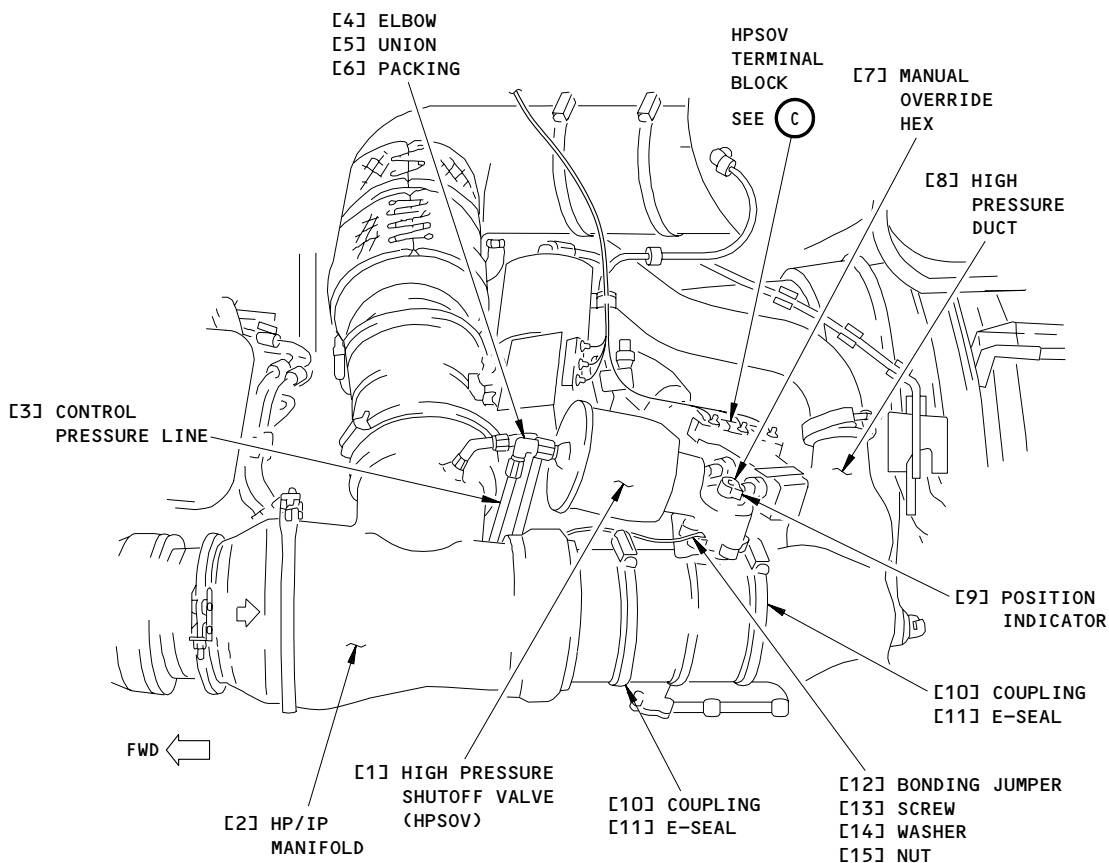


767

TASK CARD



PW 4000



HIGH PRESSURE SHUTOFF VALVE (HPSOV)



High Pressure Shutoff Valve Installation
Figure 401A (Sheet 1)

3
8
8
5

EFFECTIVITY

AIRPLANES WITH HPSOV PRE-SB 36-53;

30000

REPLACE

36-11-07-4A

HIGH PRESSURE SHUTOFF VALVE

36-R04

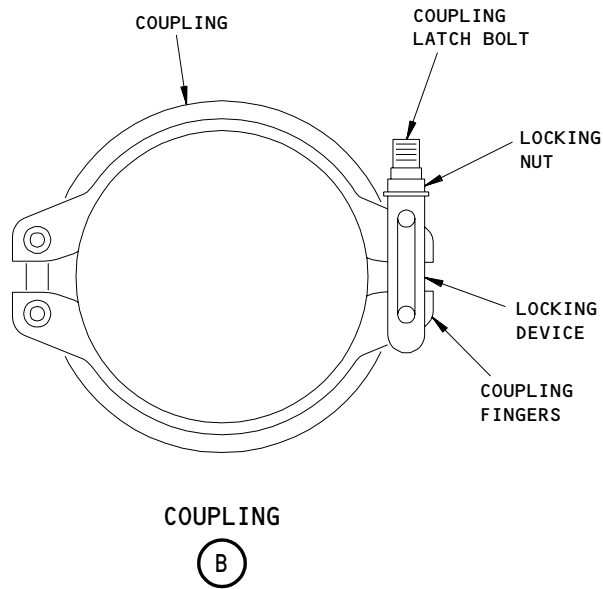
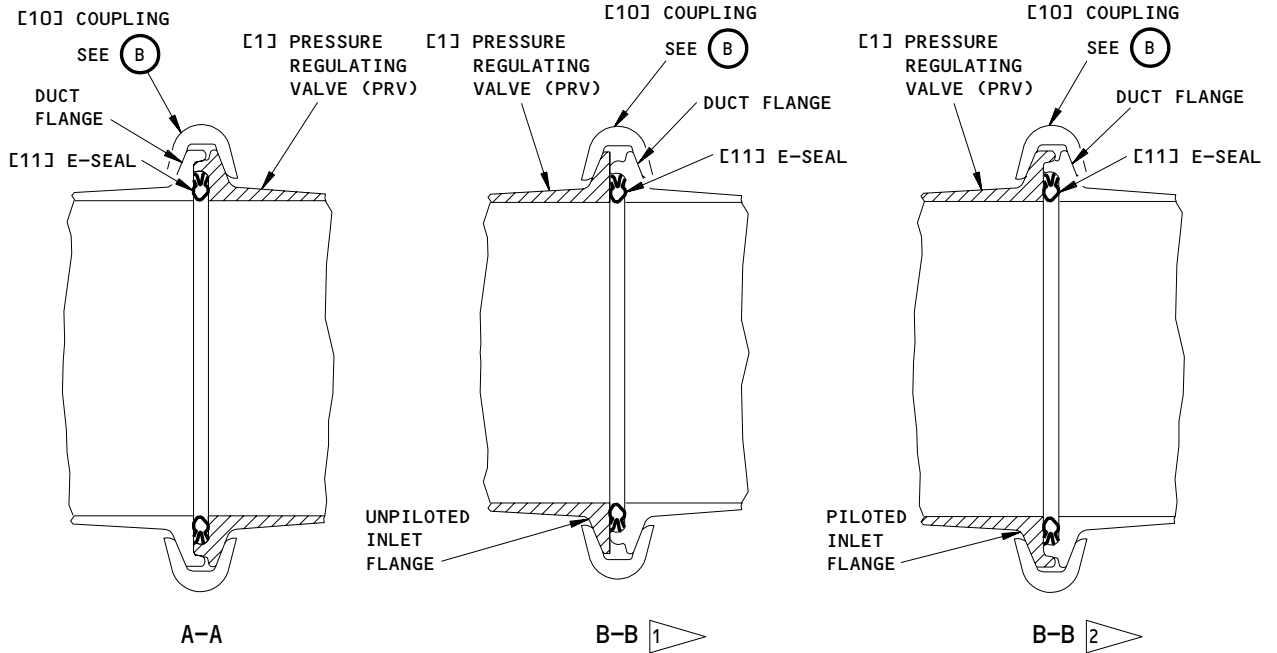
PAGE 14 OF 16 APR 22/08

SAS



TASK CARD

BOEING CARD NO. 36-R04
AIRLINE CARD NO.

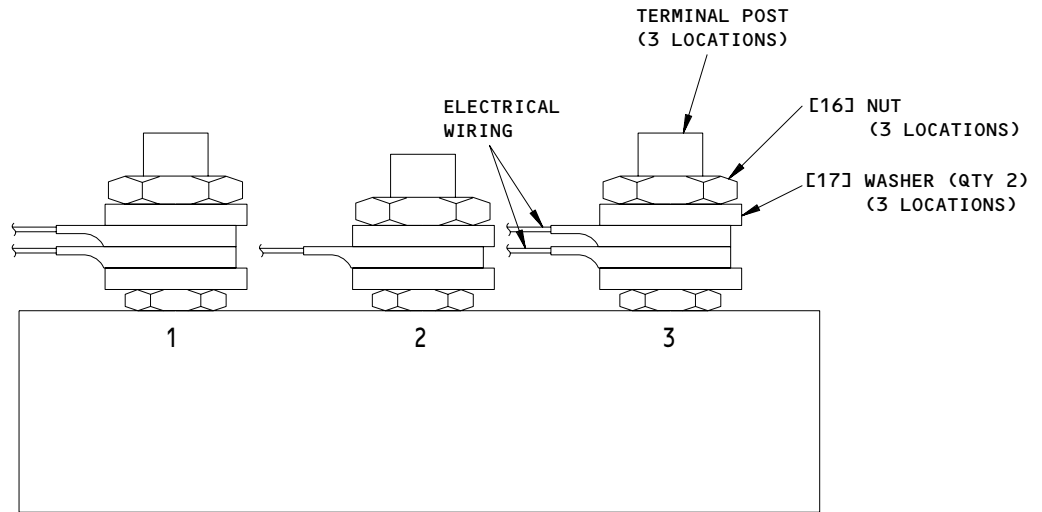


- 1 ▽ PRV WITH UNPILOTED INLET FLANGE
- 2 ▽ PRV WITH PILOTED INLET FLANGE

High Pressure Shutoff Valve Installation
Figure 401A (Sheet 2)

3 8 8 6	EFFECTIVITY	REPLACE	HIGH PRESSURE SHUTOFF VALVE
	AIRPLANES WITH HPSOV PRE-SB 36-53;	36-11-07-4A	36-R04
	L76038		PAGE 15 OF 16 APR 22/08

SAS



HPSOV TERMINAL BLOCK

(C)

High Pressure Shutoff Valve Installation
Figure 401A (Sheet 3)

3
8
8
7

EFFECTIVITY

153887 AIRPLANES WITH HPSOV PRE-SB 36-53;

REPLACE

36-11-07-4A

HIGH PRESSURE SHUTOFF VALVE

36-R04

PAGE 16 OF 16 APR 22/08

STATION
TAIL NO.
DATE



BOEING CARD NO. 36-R51
AIRLINE CARD NO.

SKILL ENGIN	WORK AREA ENGIN/STRUT	RELATED TASK	INTERVAL	PHASE	MPD REV 017	TASK CARD REVISION DEC 22/08
TASK REPLACE		TITLE PRESSURE REGULATING VALVE CONTROLLER		STRUCTURAL ILLUSTRATION REFERENCE	APPLICABILITY AIRPLANE ALL ENGINE NOTE	
ZONES 411 421			ACCESS PANELS 413AL 415AL 423AL 425AL			

MECH	INSP		MPD ITEM NUMBER 36-11-19-4A
		<p>REPLACE THE PRESSURE REGULATING VALVE CONTROLLER.</p> <p>ENGINE NOTE: APPLICABLE TO PW4000 ENGINES.</p> <p>THIS CARD IS NOT A SCHEDULED MAINTENANCE TASK. IT IS A COMPONENT CHANGE CARD AND IT IS PROVIDED FOR OPERATOR CONVENIENCE DURING UNSCHEDULED MAINTENANCE ACTIVITIES. SEE APPENDIX A OF THE 767 MAINTENANCE PLANNING DATA (MPD) DOCUMENT, D622T001, FOR A DESCRIPTION OF THE COMPONENT CHANGE CARDS.</p> <p>1. <u>Pressure Regulating Valve (PRV) Controller Removal (Fig. 401)</u></p> <p>A. References</p> <ul style="list-style-type: none"> (1) AMM 24-22-00/201, Electrical Power Control (2) AMM 36-00-00/201, Pneumatic System (3) AMM 71-11-04/201, Fan Cowl Panels (4) AMM 71-11-06/201, Core Cowl Panels (5) AMM 78-31-00/201, Thrust Reverser System <p>B. Access</p> <ul style="list-style-type: none"> (1) Location Zones <ul style="list-style-type: none"> 410 No. 1 Power Plant (Left engine) 420 No. 2 Power Plant (Right engine) 	

3 8 8 8	EFFECTIVITY	REPLACE	PRESSURE REGULATING VALVE CONTROLLER
		36-11-19-4A	36-R51 PAGE 1 OF 9 DEC 22/08

SAS



767

TASK CARD

BOEING CARD NO. 36-R51
AIRLINE CARD NO.

MECH	INSP

(2) Access Panels

- 413AL Left Fan Cowl (Left engine)
- 415AL Left Thrust Reverser (Left engine)
- 417AL Left Core Cowl (Left engine)

- 423AL Left Fan Cowl (Right engine)
- 425AL Left Thrust Reverser (Right engine)
- 427AL Left Core Cowl (Right engine)

C. Prepare for Removal

WARNING: RELEASE THE PRESSURE IN THE PNEUMATIC DUCT BEFORE YOU REMOVE A PNEUMATIC SYSTEM COMPONENT. THE HOT, HIGH-PRESSURE AIR CAN CAUSE INJURY TO PERSONS.

- (1) Remove the pneumatic power (AMM 36-00-00/201).
- (2) Open these circuit breakers on the overhead circuit breaker panel, P11, and attach DO-NOT-CLOSE tags:
 - (a) For the removal of the PRV controller on the left engine,
 - 1) 11S10, LEFT ENG BLEED IND
 - 2) 11S11, LEFT ENG BLEED CONT
 - (b) For the removal of the PRV controller on the right engine,
 - 1) 11S19, RIGHT ENG BLEED IND
 - 2) 11S20, RIGHT ENG BLEED CONT
- (3) Open this circuit breaker on the left miscellaneous electrical equipment panel, P36, and attach a DO-NOT-CLOSE tag:
 - (a) 36L7 or 36K7, AIR SUPPLY BITE
- (4) Get access to the Pressure Regulating Valve Controller (PRVC) on the 'left' side of the associated (left/right) engine:

3
8
8
9

EFFECTIVITY

--

REPLACE
36-11-19-4A

PRESSURE REGULATING VALVE CONTROLLER
36-R51 PAGE 2 OF 9 APR 22/05

SAS



767

TASK CARD

BOEING CARD NO. 36-R51
AIRLINE CARD NO.

MECH	INSP

WARNING: DO THE DEACTIVATION PROCEDURE TO PREVENT THE OPERATION OF THE THRUST REVERSER. THE ACCIDENTAL OPERATION OF THE THRUST REVERSER CAN CAUSE INJURIES TO PERSONS AND DAMAGE TO EQUIPMENT.

- (a) Do the deactivation procedure for the thrust reversers for ground maintenance (AMM 78-31-00/201).
- (b) Open the associated left fan cowl panel (413AL/423AL) (AMM 71-11-04/201).
- (c) Open the associated left core cowl panel (417AL/427AL) (AMM 71-11-06/201).

WARNING: OBEY THE INSTRUCTIONS IN THE PROCEDURE TO OPEN THE THRUST REVERSERS. IF YOU DO NOT OBEY THE INSTRUCTIONS, INJURIES TO PERSONS AND DAMAGE TO EQUIPMENT CAN OCCUR.

- (d) Open the associated left thrust reverser (415AL/425AL) (AMM 78-31-00/201).

D. PRV Controller Removal

- (1) Disconnect the clamp that attaches the wire bundle and electrical connector (12).
- (2) Disconnect the electrical connector (12) from the PRV controller (1).
- (3) Disconnect the control pressure sense line (2) from the elbow (3).
- (4) Disconnect the supply pressure sense line (6) from the elbow (7).
- (5) Disconnect the regulated pressure sense line (20) from the elbow (17).
- (6) Remove the elbow (7), reducer (8), and packing (9) from the supply pressure port (31).
 - (a) Discard the packing (9).
- (7) Remove the elbow (3), union (4), and packing (5) from the control pressure port (32).

3
8
9
0

EFFECTIVITY

--

REPLACE
36-11-19-4A

PRESSURE REGULATING VALVE CONTROLLER
36-R51 PAGE 3 OF 9 APR 22/05

MECH INSP

- (a) Discard the packing (5).
- (8) Remove the elbow (17), jamnut (18), and packing (19) from the regulated pressure port (33).
- (a) Discard the packing (19).
- (9) Remove the screw (13), washer (14), nut (15), and bonding jumper (16) from the PRV controller (1).
- (10) Remove the bolts (10) and washers (11) that attach the PRV controller (1) to the mounting bracket.
- (11) Remove the PRV controller (1).

2. Pressure Regulating Valve Controller (PRVC) Installation (Fig. 401)

A. Parts

(1) Refer to the Illustrated Parts Catalog (IPC) for the part numbers and the effectivities of the items in the table that follows:

AMM		NOMENCLATURE	AIPC		
FIG	ITEM		SUBJECT	FIG	ITEM
401	1	PRV Controller	36-11-08	06	450,490
	5	Packing	36-11-08	06	355
	9	Packing	36-11-08	06	350
	19	Packing	36-11-08	06	355
401	1	PRV Controller	36-11-08	07	35
	5	Packing	36-11-08	07	370
	9	Packing	36-11-08	07	375
	19	Packing	36-11-08	07	370

B. Consumable Materials

(1) D01062, Never-Seez, Pure Nickel Special, NSBT-8N (High temperature antiseize compound)

C. References

(1) AMM 24-22-00/201, Electrical Power Control

3
8
9
1

EFFECTIVITY	REPLACE	PRESSURE REGULATING VALVE CONTROLLER
	36-11-19-4A	36-R51 PAGE 4 OF 9 DEC 22/08

SAS



767

TASK CARD

BOEING CARD NO. 36-R51
AIRLINE CARD NO.

MECH	INSP

- (2) AMM 36-00-00/201, Pneumatic System
- (3) AMM 71-11-04/201, Fan Cowl Panels
- (4) AMM 71-11-06/201, Core Cowl Panels
- (5) AMM 78-31-00/201, Thrust Reverser System

D. Access

- (1) Location Zones
 - 410 No. 1 Power Plant (Left engine)
 - 420 No. 2 Power Plant (Right engine)
- (2) Access Panels
 - 413AL Left Fan Cowl (Left engine)
 - 415AL Left Thrust Reverser (Left engine)
 - 417AL Left Core Cowl (Left engine)
 - 423AL Left Fan Cowl (Right engine)
 - 425AL Left Thrust Reverser (Right engine)
 - 427AL Left Core Cowl (Right engine)

E. PRV Controller Installation

- (1) Put the PRV controller (1) on the mounting bracket.
 - (a) Install the bolts (10), washers (11) and tighten.
- (2) Install the screw (13), washer (14), and nut (15) that connect the bonding jumper (16) to the PRV controller (1)
 - (a) Tighten the screw (13).
- (3) Apply antiseize compound to all of the sense line fittings.
- (4) Install the packing (5), union (4), and elbow (3), in the control pressure port (32) and tighten.
- (5) Install the packing (9), reducer (8), elbow (7), in the supply pressure port (31) and tighten.
- (6) Install the packing (19), jamnut (18), elbow (17), in the regulated pressure port (33) and tighten.

3
8
9
2

EFFECTIVITY

--

REPLACE
36-11-19-4A

PRESSURE REGULATING VALVE CONTROLLER
36-R51 PAGE 5 OF 9 APR 22/05

MECH	INSP
------	------

- (7) Connect the control pressure sense line (2) to the elbow (3).
- (8) Connect the supply pressure line (6) to the elbow (7).
- (9) Connect the regulated pressure sense line (20) to the elbow (17).
- (10) Connect the electrical connector (12) to the PRV controller (1).
- (11) Remove the DO-NOT-CLOSE tags and close these circuit breakers on the P11 panel:
 - (a) For the left engine PRV controller,
 - 1) 11S10, LEFT ENG BLEED IND
 - 2) 11S11, LEFT ENG BLEED CONT
 - (b) For the right engine PRV controller,
 - 1) 11S19, RIGHT ENG BLEED IND
 - 2) 11S20, RIGHT ENG BLEED CONT
- (12) Remove the DO-NOT-CLOSE tag and close this circuit breaker on the P36 panel:
 - (a) 36L7 or 36K7, AIR SUPPLY BITE
- (13) Do a test of the PRV controller:
 - (a) Make sure the applicable left or right engine bleed air switch-light is in the OFF position.
 - (b) Supply electrical power (AMM 24-22-00/201).
 - (c) Push the applicable left or right engine bleed air switch-light to the ON then OFF position.
 - 1) At the PRV controller, in approximately 10 seconds, listen for a click while the controller solenoid operates.

F. Put the Airplane Back To It's Usual Condition

- (1) Close up the access to the Pressure Regulating Valve Controller (PRVC) on the 'left' side of the associated (left/right) engine:

3
8
9
3

EFFECTIVITY	REPLACE	PRESSURE REGULATING VALVE CONTROLLER
	36-11-19-4A	36-R51 PAGE 6 OF 9 APR 22/05

MECH	INSP
------	------

WARNING: OBEY THE INSTRUCTIONS IN THE PROCEDURE TO CLOSE THE THRUST REVERSERS. IF YOU DO NOT OBEY THE INSTRUCTIONS, INJURIES TO PERSONS AND DAMAGE TO EQUIPMENT CAN OCCUR.

- (a) Close the associated left thrust reverser (415AL/425AL) (AMM 78-31-00/201).
 - (b) Close the associated left core cowl panel (417AL/427AL) (AMM 71-11-06/201).
 - (c) Close the associated left fan cowl panel (413AL/423AL) (AMM 71-11-04/201).
 - (d) Do the activation procedure for the thrust reversers for ground maintenance (AMM 78-31-00/201).
- (2) Remove electrical power if it is not necessary (AMM 24-22-00/201).

3
8
9
4

EFFECTIVITY



REPLACE

36-11-19-4A

PRESSURE REGULATING VALVE CONTROLLER

36-R51

PAGE 7 OF 9 APR 22/05

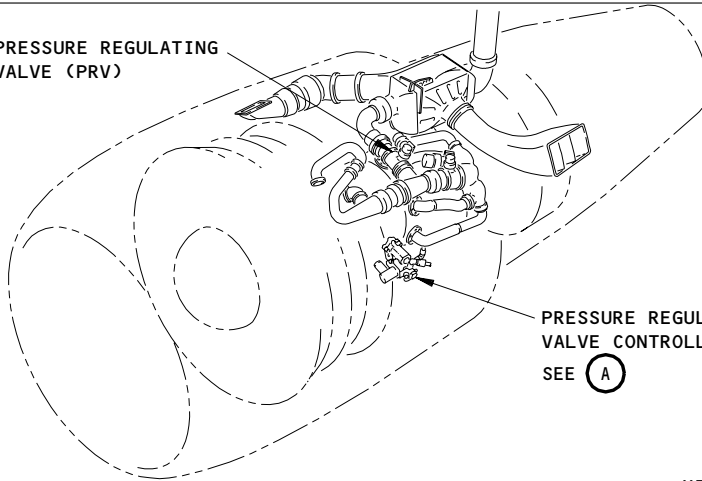
SAS



767

TASK CARD

PRESSURE REGULATING VALVE (PRV)

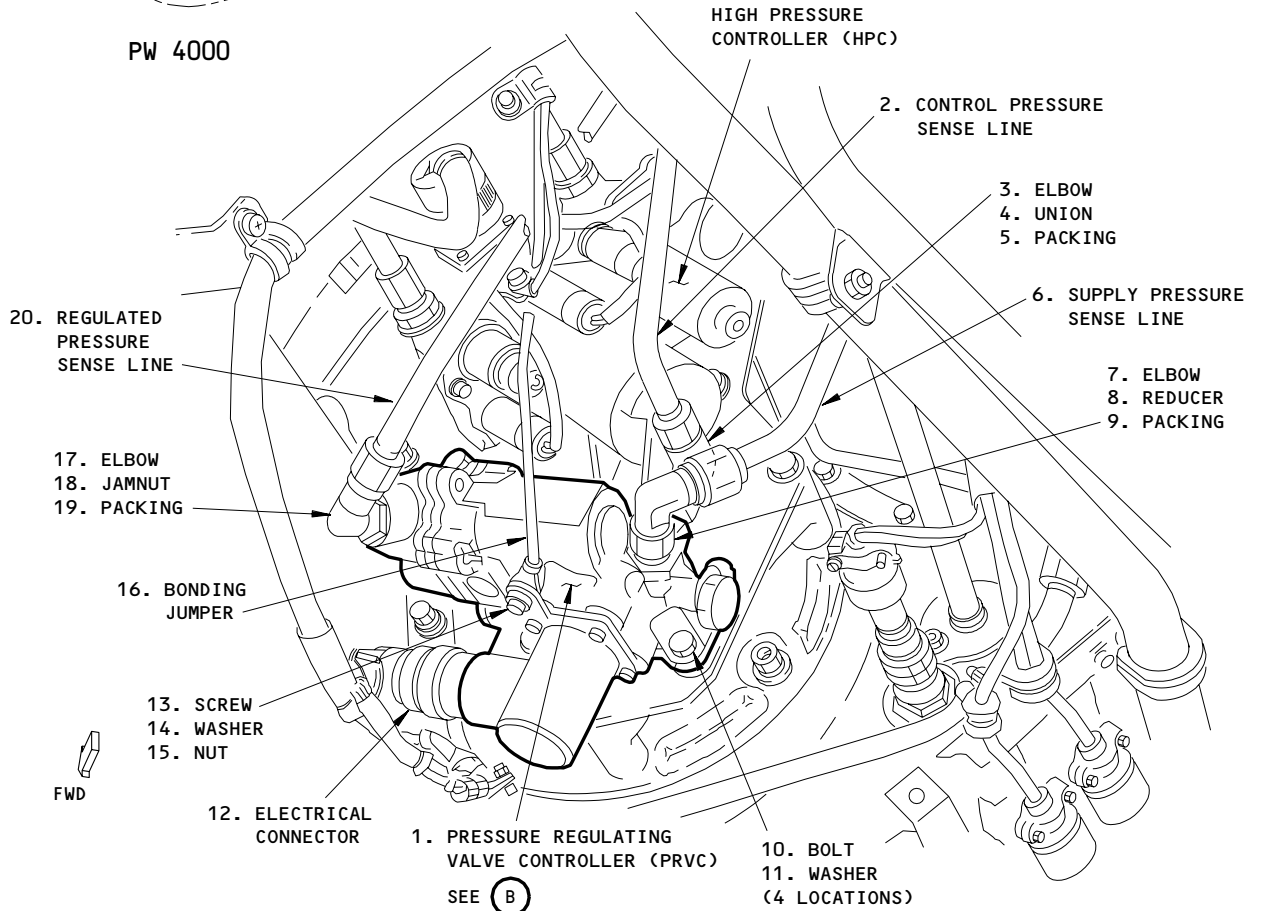


PRESSURE REGULATING VALVE CONTROLLER (PRVC)

SEE (A)

PW 4000

HIGH PRESSURE CONTROLLER (HPC)



2. CONTROL PRESSURE SENSE LINE

3. ELBOW

4. UNION

5. PACKING

6. SUPPLY PRESSURE SENSE LINE

7. ELBOW

8. REDUCER

9. PACKING

20. REGULATED PRESSURE SENSE LINE

17. ELBOW

18. JAMNUT

19. PACKING

16. BONDING JUMPER

13. SCREW

14. WASHER

15. NUT

FWD

12. ELECTRICAL CONNECTOR

1. PRESSURE REGULATING VALVE CONTROLLER (PRVC)

SEE (B)

10. BOLT

11. WASHER

(4 LOCATIONS)

PRESSURE REGULATING VALVE CONTROLLER (PRVC)

(A)

Pressure Regulating Valve Controller (PRVC)
Figure 401 (Sheet 1)

3
8
9
5

EFFECTIVITY

373225

REPLACE

36-11-19-4A

PRESSURE REGULATING VALVE CONTROLLER

36-R51

PAGE 8 OF 9 APR 22/05

SAS



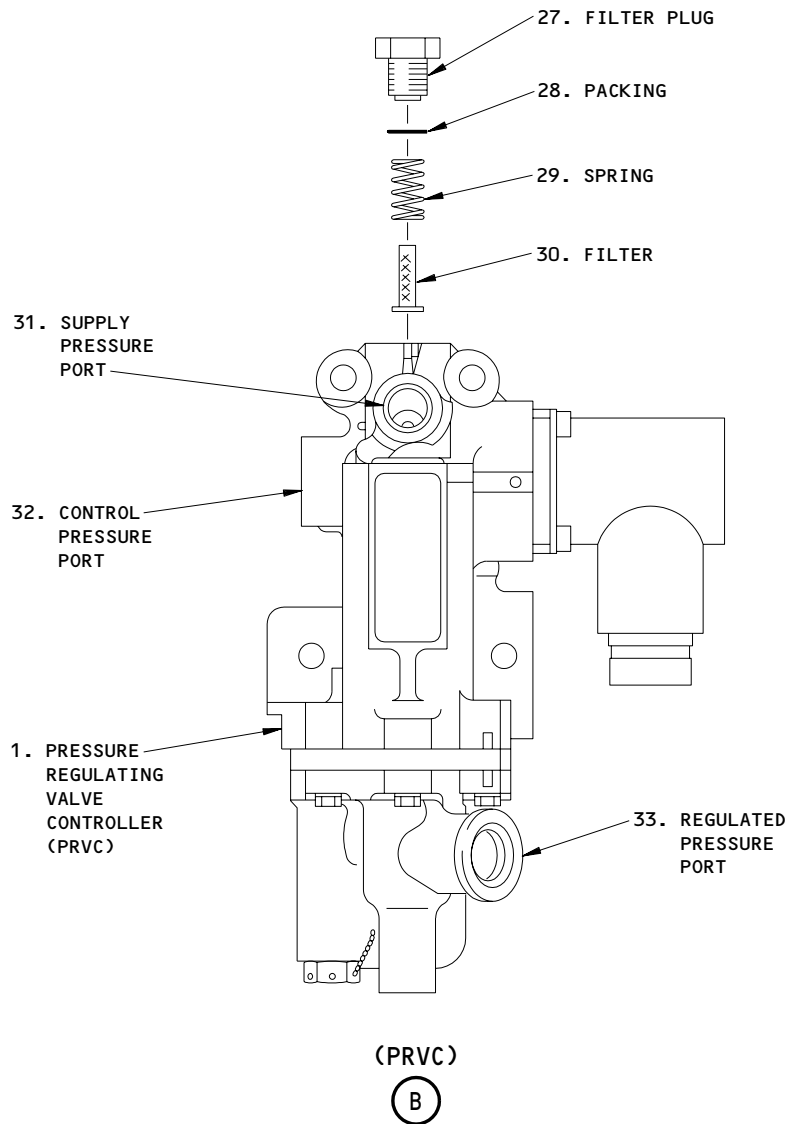
767

TASK CARD

BOEING CARD NO.

36-R51

AIRLINE CARD NO.



Pressure Regulating Valve Controller (PRVC)
Figure 401 (Sheet 2)

3
8
9
6

EFFECTIVITY

373217

REPLACE

36-11-19-4A

PRESSURE REGULATING VALVE CONTROLLER

36-R51

PAGE 9 OF 9 APR 22/05

STATION
TAIL NO.
DATE



BOEING CARD NO. 36-R62
AIRLINE CARD NO.

SKILL ENGIN	WORK AREA ENGIN/STRUT	RELATED TASK	INTERVAL	PHASE	MPD REV 012	TASK CARD REVISION APR 22/08
TASK REPLACE		TITLE PRESSURE REGULATING VALVE		STRUCTURAL ILLUSTRATION REFERENCE		APPLICABILITY AIRPLANE ENGINE ALL NOTE
ZONES 410 420			ACCESS PANELS 413AL 415AL 417AL 423AL 425AL 427AL			

MECH	INSP	MPD ITEM NUMBER 36-11-18-4A	
		<p>REPLACE THE PRESSURE REGULATING VALVE.</p> <p>ENGINE NOTE: APPLICABLE TO PW4000 ENGINES ONLY.</p> <p>THIS CARD IS NOT A SCHEDULED MAINTENANCE TASK. IT IS A COMPONENT CHANGE CARD AND IT IS PROVIDED FOR OPERATOR CONVENIENCE DURING UNSCHEDULED MAINTENANCE ACTIVITIES. SEE APPENDIX A OF THE 767 MAINTENANCE PLANNING DATA (MPD) DOCUMENT, D622T001, FOR A DESCRIPTION OF THE COMPONENT CHANGE CARDS.</p> <p>1. <u>Pressure Regulating Valve (PRV) Removal</u> (Fig. 401)</p> <p>A. References</p> <ul style="list-style-type: none"> (1) AMM 36-00-00/201, Pneumatics - General (2) AMM 36-11-01/401, Pneumatic Duct (3) AMM 71-11-04/201, Fan Cowl Panels (4) AMM 71-11-06/201, Core Cowl Panels (5) AMM 78-31-00/201, Thrust Reverser System <p>B. Access</p> <ul style="list-style-type: none"> (1) Location Zones <ul style="list-style-type: none"> 410 No. 1 Power Plant (left engine) 420 No. 2 Power Plant (right engine) 	

3 8 9 7	EFFECTIVITY	REPLACE	PRESSURE REGULATING VALVE
		36-11-18-4A	36-R62 PAGE 1 OF 15 APR 22/04

SAS



767

TASK CARD

BOEING CARD NO. 36-R62
AIRLINE CARD NO.

MECH	INSP

(2) Access Panels

- 413AL Left Fan Cowl (left engine)
- 415AL Left Thrust Reverser (left engine)
- 417AL Left Core Cowl (left engine)
- 423AL Left Fan Cowl (right engine)
- 425AL Left Thrust Reverser (right engine)
- 427AL Left Core Cowl (right engine)

C. Prepare for Removal

WARNING: RELEASE THE PRESSURE IN THE PNEUMATIC DUCT BEFORE YOU REMOVE A PNEUMATIC SYSTEM COMPONENT. THE HOT, HIGH-PRESSURE AIR CAN CAUSE INJURY TO PERSONS.

- (1) Remove the pneumatic power (AMM 36-00-00/201).
- (2) Open these circuit breakers and attach DO-NOT-CLOSE tags:
 - (a) Pilots' Overhead Circuit Breaker panel, P11
 - 1) For the left PRV:
 - a) 11S10, LEFT ENG BLEED IND
 - b) 11S11, LEFT ENG BLEED CONT
 - 2) For the right PRV:
 - a) 11S19, RIGHT ENG BLEED IND
 - b) 11S20, RIGHT ENG BLEED CONT
 - (b) Left Miscellaneous Electrical Equipment panel, P36
 - 1) 36L7 or 36K7, AIR SUPPLY BITE
- (3) Get access to the PRV on left side of engine:
 - (a) Do this procedure: Thrust Reverser Deactivation for Ground Maintenance (AMM 78-31-00/201).
 - (b) Open the left fan cowl panel (AMM 71-11-04/201).
 - (c) Open the left core cowl panel (AMM 71-11-06/201).

3
8
9
8

EFFECTIVITY

--

REPLACE

36-11-18-4A

PRESSURE REGULATING VALVE

36-R62

PAGE 2 OF 15 APR 22/04

MECH	INSP

WARNING: OBEY THE INSTRUCTIONS IN THE PROCEDURE TO OPEN THE THRUST REVERSERS. IF YOU DO NOT OBEY THE INSTRUCTIONS, INJURIES TO PERSONS AND DAMAGE TO EQUIPMENT CAN OCCUR.

(d) Open the left thrust reverser (AMM 78-31-00/201).

D. Pressure Regulating Valve (PRV) Removal

- (1) Remove the screw (6), washer (7), nut (8), and bonding jumper (9) from the PRV (1).
- (2) Disconnect the electrical wiring from the PRV terminal block:
 - (a) Remove the nut (13) and two washers (14) from the terminal posts No.1,2,3 on the PRV terminal block.
 - (b) Put tags on the wires to help identify them for re-installation to the terminal posts.
- (3) AIRPLANES WITH PRV POST-SB 36-53;
AIRPLANES WITH PRV P/N S210T120-141 (PRR B12745);
Disconnect the electrical wiring connected to the PRV actuator and PRV heatshield:
 - (a) Remove the washer (21), nut (22) to disconnect the P-clamp (23) and wiring from the support clamp (20) on the PRV actuator.
 - 1) Re-install the washer (21) and nut (22) to keep the three spacers (24) attached to the support clamp (20).
 - (b) Loosen and remove the support clamp (20) from the valve actuator and keep for subsequent installation.
 - (c) Cut the lockwire then remove the washer (26) and screw (27) to disconnect the P-clamp (28) and wiring from the PRV heatshield.
 - 1) Re-install the washer (26) and screw (27) to the PRV heatshield.
- (4) Disconnect the control pressure line from the PRV actuator port.
 - (a) Loosen the B-nut to disconnect the elbow (6) from the union (7) connected to the PRV actuator port and control pressure line.
 - (b) Remove the union (7) and packing (8) from the PRV actuator port

3
8
9
9

EFFECTIVITY

--

REPLACE
36-11-18-4A

PRESSURE REGULATING VALVE
36-R62 PAGE 3 OF 15 APR 22/08

MECH	INSP

- 1) Discard the packing (8).
- 2) Keep the union (7) with the elbow (6) for re-installation.
- (c) Put a cover on the control pressure line to keep out unwanted material.
- (5) Remove the two couplings (2) and (4) from the PRV (1).
- (6) Remove the PRV (1) from the mating duct sections.
- NOTE:** If you cannot easily remove the PRV because it is too tight, loosen one of the duct sections on either side of the PRV (AMM 36-11-01/401).
- (a) Remove the E-seals (3) and (5) and keep for later installation.
- (7) Put covers on the duct openings to keep out unwanted material.

2. Pressure Regulating Valve (PRV) Installation (Fig. 401)

A. Consumable Materials

- (1) D01062, Never-Seez, Pure Nickel Special, NSBT-8N (High temperature antiseize compound)
- (2) G00145, Tape - Permacel P-421 (or P-440)

B. References

- (1) AMM 20-10-21/601, Electrical Bonding
- (2) AMM 24-22-00/201, Electrical Power - Control
- (3) AMM 36-11-01/401, Pneumatic Duct
- (4) AMM 71-11-04/201, Fan Cowl Panels
- (5) AMM 71-11-06/201, Core Cowl Panels
- (6) AMM 78-31-00/201, Thrust Reverser System
- (7) SWPM 20-20-00, Electrical Bonds and Grounds

C. Access

3
9
0
0

EFFECTIVITY

REPLACE

36-11-18-4A

PRESSURE REGULATING VALVE

36-R62

PAGE 4 OF 15 APR 22/04

MECH	INSP

- (1) Location Zones
 - 410 No. 1 Power Plant (left engine)
 - 420 No. 2 Power Plant (right engine)

- (2) Access Panels
 - 413AL Left Fan Cowl (left engine)
 - 415AL Left Thrust Reverser (left engine)
 - 417AL Left Core Cowl (left engine)
 - 423AL Left Fan Cowl (right engine)
 - 425AL Left Thrust Reverser (right engine)
 - 427AL Left Core Cowl (right engine)

D. Pressure Regulating Valve (PRV) Installation

- (1) Prior to PRV installation, reposition the PRV grounding tab on the PRV actuator such that it will not interfere with the movement of the PRV visual position indicator lever (if necessary).

NOTE: One end of the PRV grounding tab connects to the PRV actuator with a bolt, two washers, retaining cable, and lockwire.

- (2) Remove the covers from the duct openings.
- (3) Examine the duct flanges for damage.

CAUTION: BE CAREFUL WITH THE PRV E-SEALS. YOU CAN EASILY DAMAGE THEM. INSTALLATION OF DAMAGED E-SEALS CAN CAUSE TOO MUCH LEAKAGE.

- (4) Examine the E-seals (3) and (5) to make sure they are free of cracks, dents, or other damage.
 - (a) Replace the E-seals if found damaged.
- (5) Install the E-seal (3) into the mating duct flange (PRV inlet) and the E-seal (5) into the PRV outlet flange.

CAUTION: MAKE SURE YOU INSTALL THE LOCKING DEVICE OF THE COUPLING CORRECTLY AS SHOWN IN FIGURE 401. IF YOU DO NOT INSTALL THE COUPLING FINGERS INSIDE THE LOCKING DEVICE THE COUPLING CAN LOOSEN AND CAUSE DAMAGE TO EQUIPMENT.

3
9
0
1

EFFECTIVITY

--

REPLACE
36-11-18-4A

PRESSURE REGULATING VALVE
36-R62
PAGE 5 OF 15 APR 22/04

MECH	INSP

- (6) Put the PRV (1) between the duct openings, then loosely install the couplings (2) and (4) but do not tighten them yet.
 - (a) If you cannot easily install the PRV because it is too tight, loosen one of the duct sections on either side of the PRV (AMM 36-11-01/401).

- (7) Adjust the PRV (1) to align the PRV actuator port with the control pressure line.
 - (a) Make sure there is 0.62+/-0.25 inches of clearance between the PRV valve actuator and the 15th-stage duct (Port No. 2).

CAUTION: DO NOT TORQUE THE COUPLINGS MORE THAN THE SPECIFIED LIMIT. IF YOU APPLY TOO MUCH TORQUE, THE VALVE FLOW BODY CAN WARP (BECOME OVAL) AND CAUSE THE VALVE TO BIND DURING OPERATION.

- (8) Tighten the couplings (2) and (4) to a torque of 115-125 pound-inches (13-14 Newton-meters).

NOTE: Make sure you align the joints of the duct and PRV correctly before you tighten the couplings. The duct and PRV flanges will not automatically align themselves when you tighten the couplings. Do a check of the joints after you tighten the couplings.

- (9) Connect the control pressure line to the PRV actuator port.
 - (a) Apply antiseize compound to the threads of the union (7).
 - (b) Install a new packing (8) onto the union (7) then re-install the union (7) to the PRV actuator port.
 - (c) Connect the elbow (6) to the union (7) and tighten the B-nut.
- (10) Connect the electrical wiring to the terminal posts No.1,2,3 on the PRV terminal block.
 - (a) Install the wiring lugs between the two washers (14) and secure to the terminal post with the nut (13).

NOTE: Make sure you install the terminal lug barrel in the up position.

3
9
0
2

EFFECTIVITY

--

REPLACE
36-11-18-4A

PRESSURE REGULATING VALVE
36-R62 PAGE 6 OF 15 APR 22/04

MECH	INSP

- (11) AIRPLANES WITH PRV POST-SB 36-53;
AIRPLANES WITH PRV P/N S210T120-141 (PRR B12745);
Connect the electrical wiring to the PRV heatshield and to the PRV actuator.
 - (a) Remove and discard the old tape under the P-clamp (9C) and around the PRV wiring, then replace with 2-4 layers of new Permacel tape P-421 (or P-440).
 - (b) Install the P-clamp (28) to the PRV heatshield with the washer (26) and screw (27).
 - 1) Tighten the screw (27) to a torque of 25-30 pound-inches (2.8-3.4 Newton-meters) above running torque, then install a new lockwire to the screw (27).
 - (c) Install the support clamp (20) around the PRV actuator then adjust the clamp to permit connection of the P-clamp (23).
 - 1) Connect the P-clamp (23) to the support clamp (20) with the three spacers (24), washer (21) and nut (22).
 - 2) Tighten the support clamp (20) to a torque of 30-40 pound-inches (3.4-4.5 Newton-meters).
- (12) Install the bonding jumper (9), nut (8), washer (7) and screw (6) to the PRV (1).
 - (a) Measure the electrical resistance between the ground tab and the bonding jumper and make sure it is less than 0.005 ohms (AMM 20-10-21/601 and SWPM 20-20-00).
- (13) If it is necessary, tighten any loose duct sections (AMM 36-11-01/401).

E. PRV Post-Installation Test

- (1) Remove the DO-NOT-CLOSE tags and close these circuit breakers:
 - (a) Pilots' Overhead Circuit Breaker panel, P11
 - 1) For the Left PRV:
 - a) 11S10, LEFT ENG BLEED IND
 - b) 11S11, LEFT ENG BLEED CONT

3
9
0
3

EFFECTIVITY

REPLACE

36-11-18-4A

PRESSURE REGULATING VALVE

36-R62

PAGE 7 OF 15 APR 22/08

MECH	INSP

- 2) For the right PRV:
 - a) 11S19, RIGHT ENG BLEED IND
 - b) 11S20, RIGHT ENG BLEED CONT
- (b) Left Miscellaneous Electrical Equipment panel, P36
 - 1) 36L7 or 36K7, AIR SUPPLY BITE
- (2) Supply electrical power (AMM 24-22-00/201).
- (3) Do a leakage check of the PRV coupling and control pressure line connections:
 - (a) Make sure the high pressure shutoff valve (HPSOV) is in the full closed position.
 - 1) If the valve is not closed, turn the valve manual drive until the position indicator is in the closed position.
 - (b) Pressurize the pneumatic ducts upstream of the PRSOV (AMM 36-00-00/201).
 - (c) Manually open the PRV to pressurize duct between PRV and HPSOV.
 - (d) Make sure there is no leakage at the PRV control pressure line connection.
 - 1) Repair the cause of any leakage.
 - (e) Make sure there is no leakage at the PRV coupling connections.

NOTE: Diffused leakage is permitted.

 - 1) To repair jet blast leakage, align the joint or coupling.
 - (f) Remove the pneumatic pressure upstream of the PRSOV (AMM 36-00-00/201).
- (4) Do the Air Supply System BITE Check (AMM 36-23-00/501).

NOTE: The System BITE Test verifies the electrical operation of the Pressure Regulating Valve (PRV).

MECH	INSP
------	------

F. Put the Airplane Back to Its Usual Condition

(1) Close the access to the PRV on left side of the engine:

WARNING: OBEY THE INSTRUCTIONS IN THE PROCEDURE TO CLOSE THE THRUST REVERSERS. IF YOU DO NOT OBEY THE INSTRUCTIONS, INJURIES TO PERSONS AND DAMAGE TO EQUIPMENT CAN OCCUR.

(a) Close the left thrust reverser (AMM 78-31-00/201).

(b) Close the left core cowl panel (AMM 71-11-06/201).

(c) Close the left fan cowl panel (AMM 71-11-04/201).

(d) Do the activation procedure for the thrust reversers (AMM 78-31-00/201).

(2) Remove electrical power if it is not necessary (AMM 24-22-00/201).

3
9
0
5

EFFECTIVITY

REPLACE

36-11-18-4A

PRESSURE REGULATING VALVE

36-R62

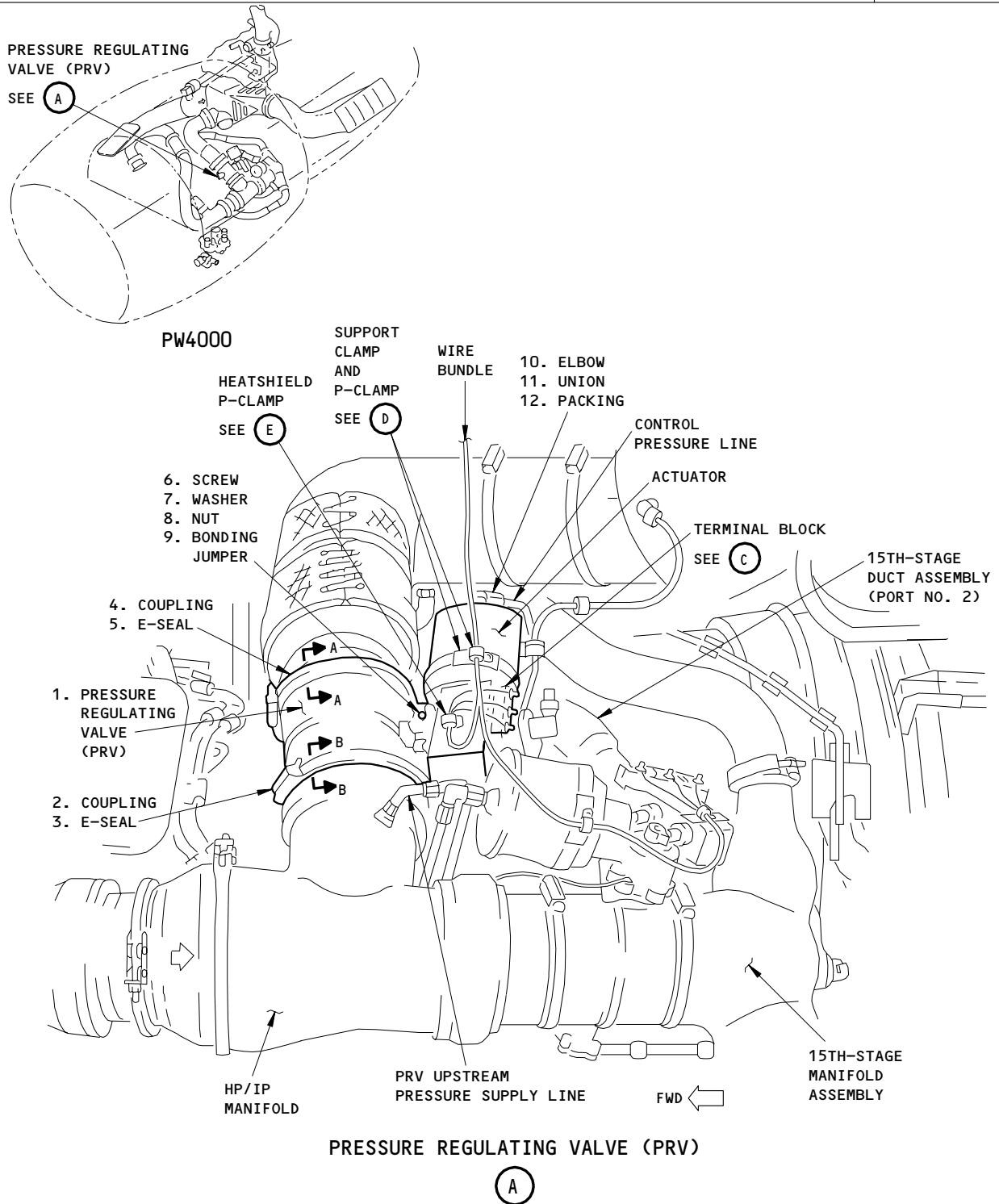
PAGE 9 OF 15 DEC 22/07

SAS



767

TASK CARD



Pressure Regulating Valve Installation
Figure 401 (Sheet 1)

3
9
0
6

EFFECTIVITY

AIRPLANES WITH PRV POST-SB 36-53;
PRV P/N S210T120-141 (PRR B12745)

REPLACE

36-11-18-4A

PRESSURE REGULATING VALVE

36-R62

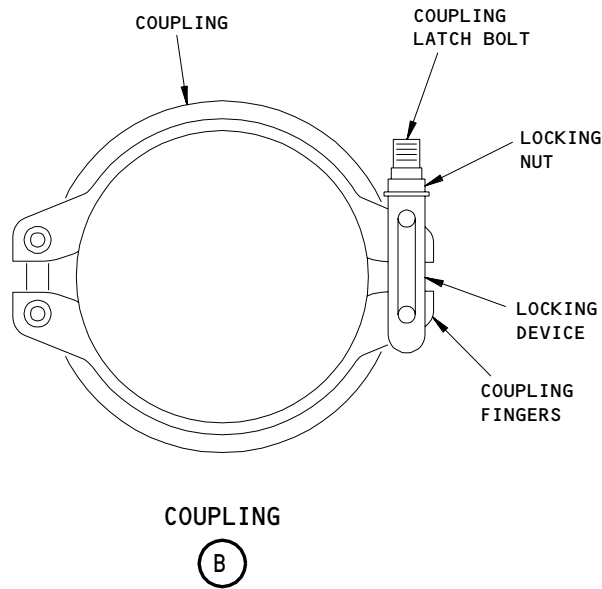
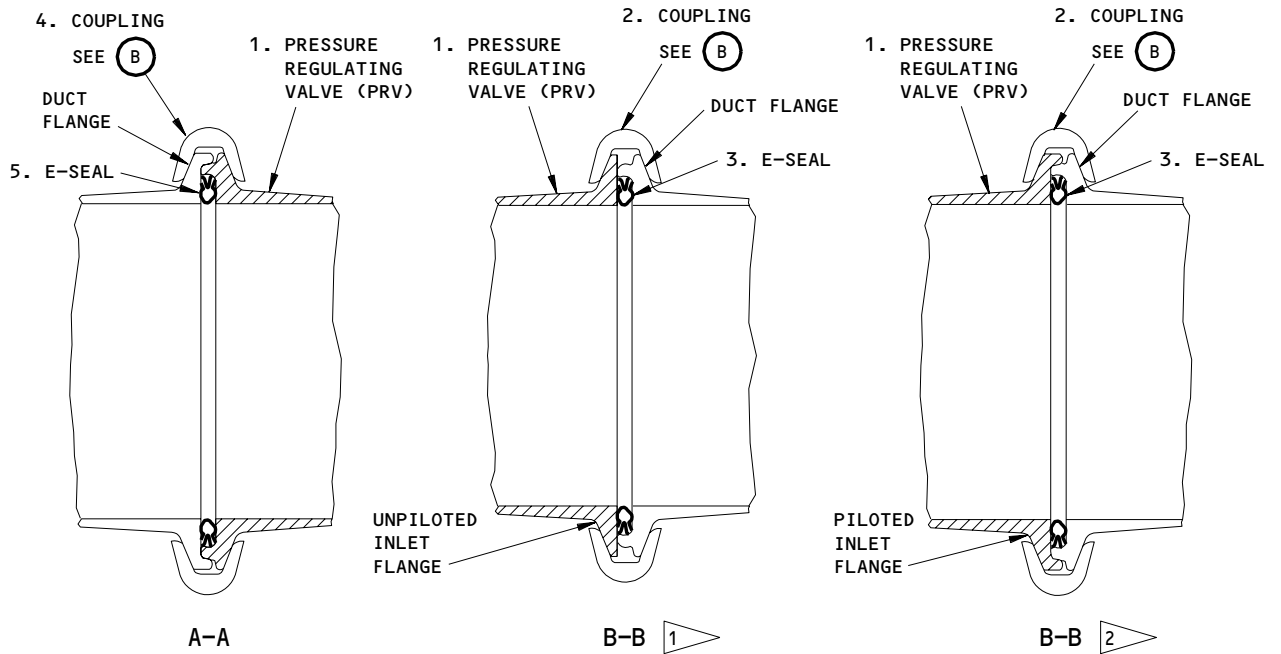
PAGE 10 OF 15 DEC 22/03

SAS



767
TASK CARD

BOEING CARD NO. 36-R62
AIRLINE CARD NO.



- 1 ▷ PRV WITH UNPILOTED INLET FLANGE
- 2 ▷ PRV WITH PILOTED INLET FLANGE

Pressure Regulating Valve Installation
Figure 401 (Sheet 2)

3 9 0 7	EFFECTIVITY	REPLACE	PRESSURE REGULATING VALVE
	AIRPLANES WITH PRV POST-SB 36-53; PRV P/N S210T120-141 (PRR B12745)	36-11-18-4A	36-R62
			PAGE 11 OF 15 DEC 22/03

SAS



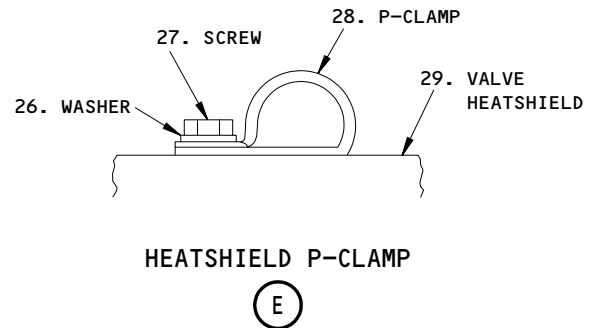
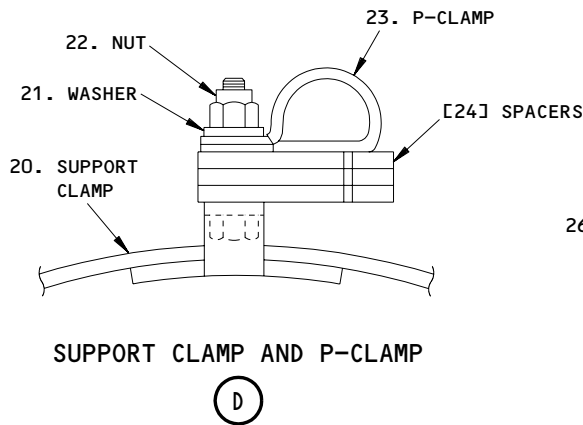
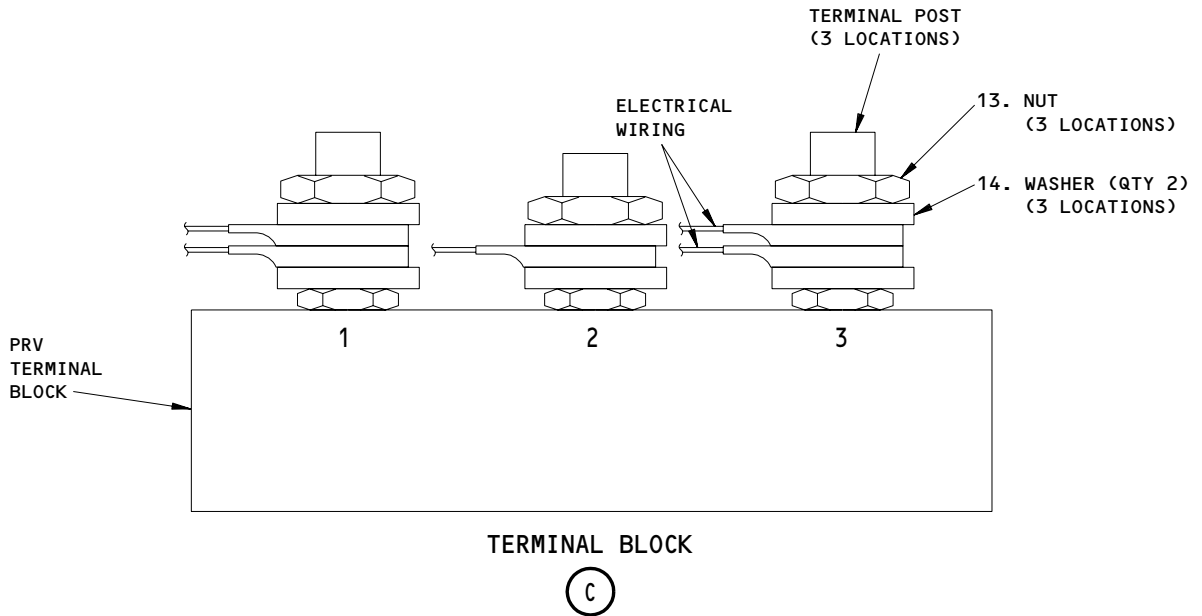
767

TASK CARD

BOEING CARD NO.

36-R62

AIRLINE CARD NO.



Pressure Regulating Valve Installation
Figure 401 (Sheet 3)

3
9
0
8

EFFECTIVITY

AIRPLANES WITH PRV POST-SB 36-53;
PRV P/N S210T120-141 (PRR B12745)

REPLACE

36-11-18-4A

PRESSURE REGULATING VALVE

36-R62

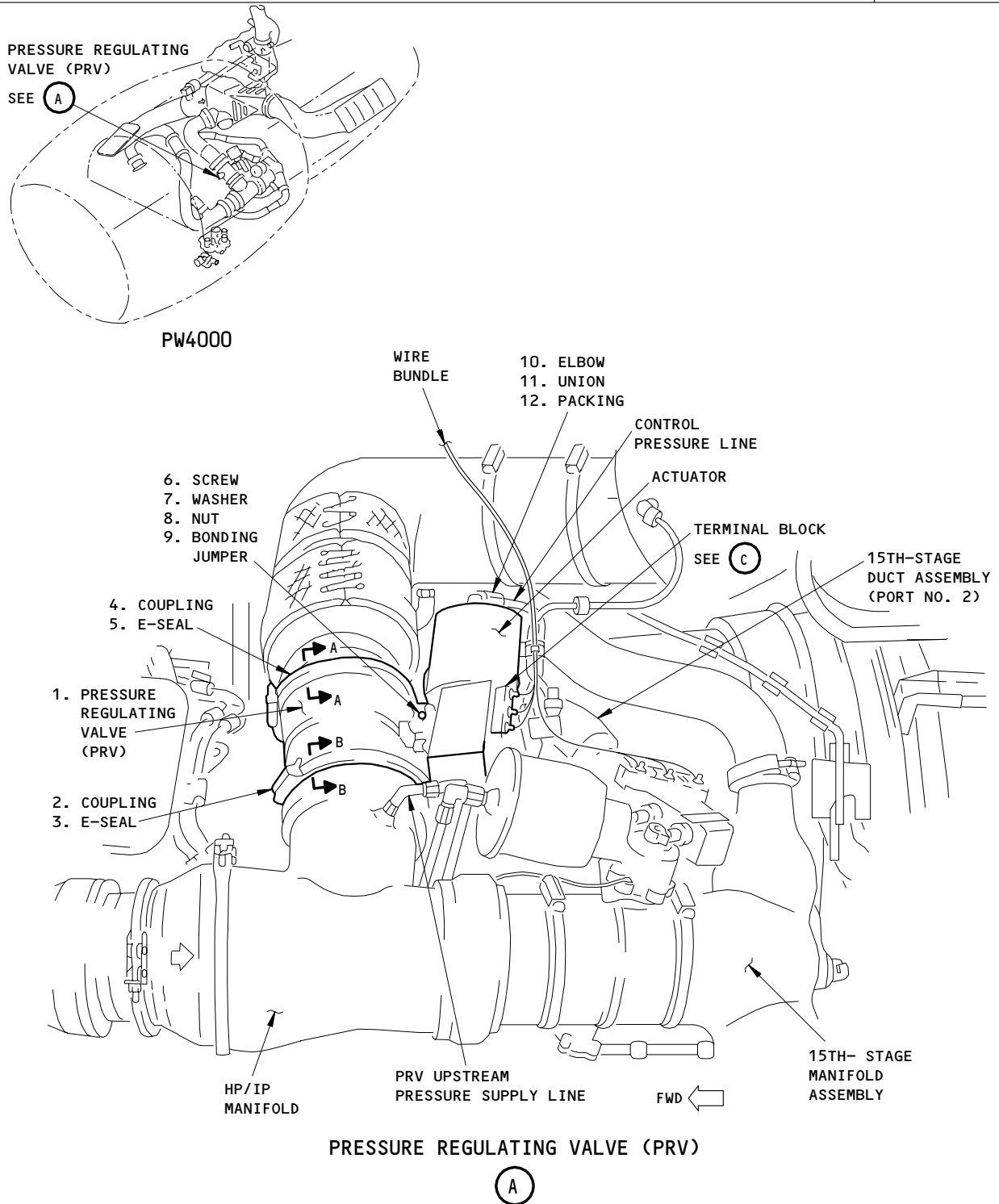
PAGE 12 OF 15 APR 22/08

SAS



767

TASK CARD



Pressure Regulating Valve Installation
Figure 401A (Sheet 1)

3
9
0
9

EFFECTIVITY

AIRPLANES WITH PRV PRE-SB 36-53;
PRV P/N S210T120-131 OR EARLIER

REPLACE

36-11-18-4A

PRESSURE REGULATING VALVE

36-R62

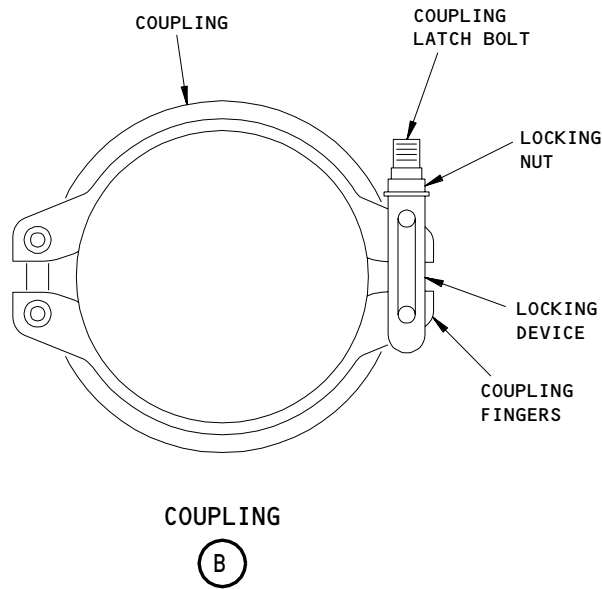
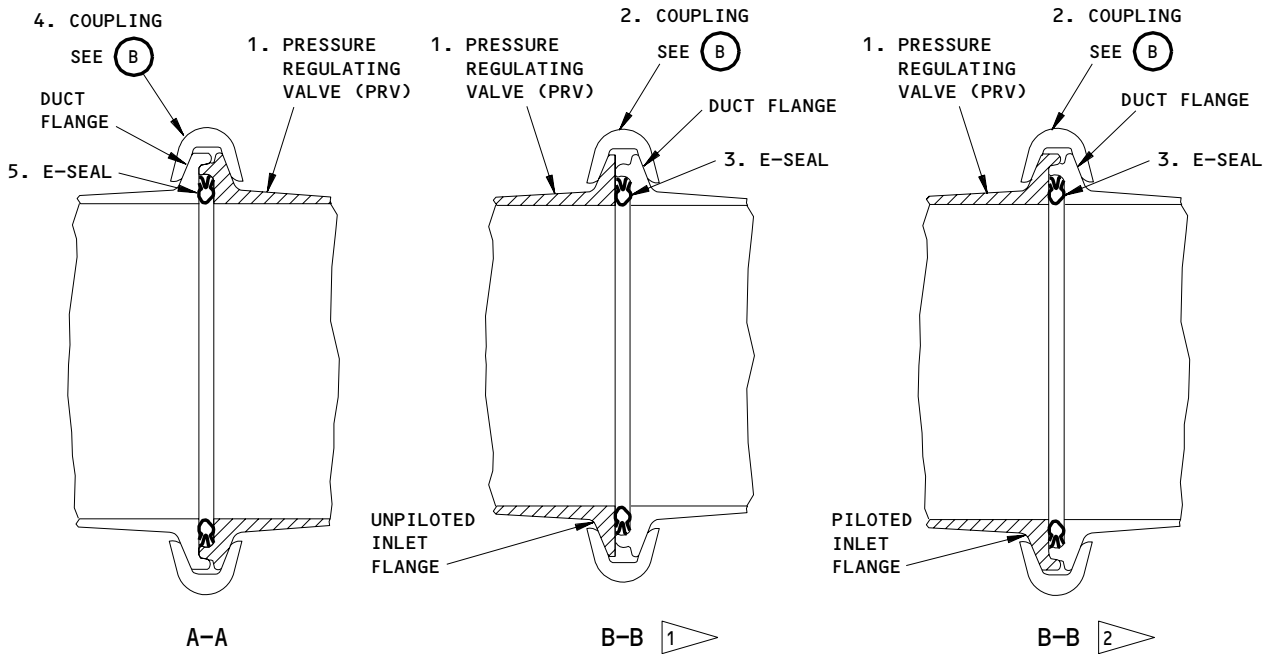
PAGE 13 OF 15 DEC 22/03

SAS



767
TASK CARD

BOEING CARD NO. 36-R62
AIRLINE CARD NO.



- 1 ▷ PRV WITH UNPILOTED INLET FLANGE
- 2 ▷ PRV WITH PILOTED INLET FLANGE

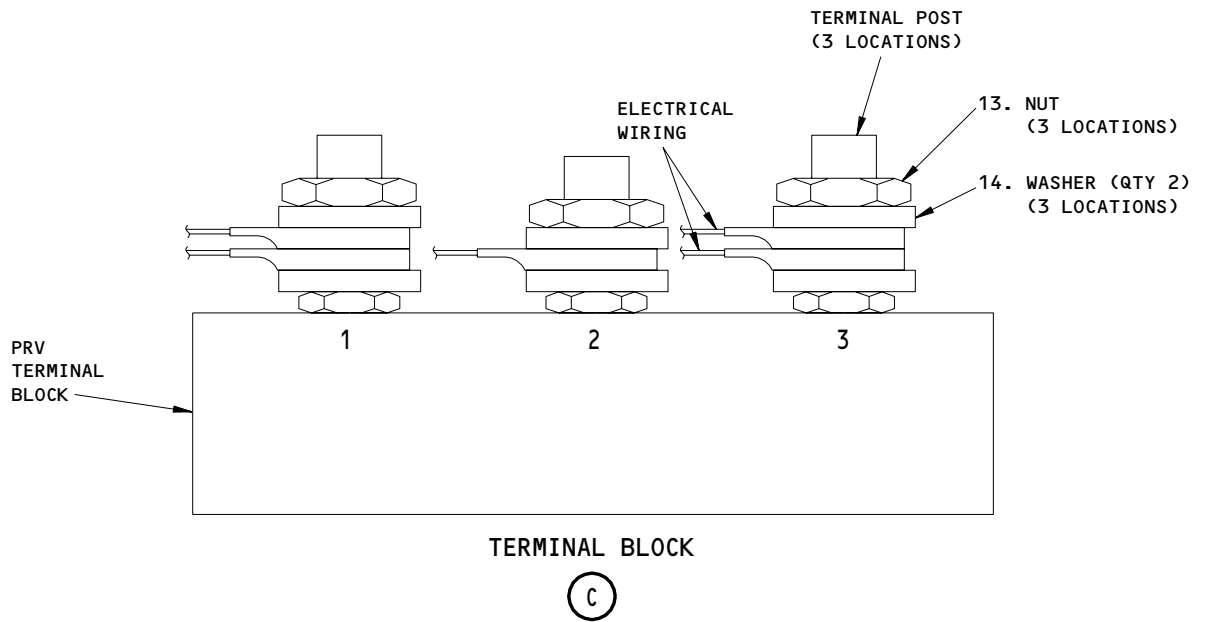
Pressure Regulating Valve Installation
Figure 401A (Sheet 2)

3 9 1 0	EFFECTIVITY	REPLACE	PRESSURE REGULATING VALVE
	AIRPLANES WITH PRV PRE-SB 36-53; PRV P/N S210T120-131 OR EARLIER	36-11-18-4A	36-R62
			PAGE 14 OF 15 DEC 22/03

SAS



BOEING CARD NO. 36-R62
AIRLINE CARD NO.



Pressure Regulating Valve Installation
Figure 401A (Sheet 3)

3
9
1
1

EFFECTIVITY

AIRPLANES WITH PRV PRE-SB 36-53;
PRV P/N S210T120-131 OR EARLIER

REPLACE

36-11-18-4A

PRESSURE REGULATING VALVE

36-R62

PAGE 15 OF 15 DEC 22/03

STATION
TAIL NO.
DATE



BOEING CARD NO. 36-002-01
AIRLINE CARD NO.

SKILL AIRPL	WORK AREA CREW CABIN	RELATED TASK	INTERVAL 1C	PHASE 11212	MPD REV 012	TASK CARD REVISION AUG 22/00
TASK FUNCTIONAL	TITLE AIR SUPPLY DISTRIBUTION	STRUCTURAL ILLUSTRATION REFERENCE		APPLICABILITY AIRPLANE ENGINE ALL ALL		
ZONES 212		ACCESS PANELS				

MECH	INSP	MPD ITEM NUMBER 36-11-00-5A	
		<p>FUNCTIONALLY CHECK THE AIR SUPPLY DISTRIBUTION SYSTEM FOR LEAKAGE.</p> <p>1. <u>Air Supply Distribution System Gross Leakage Test (Fig. 503)</u></p> <p>A. Equipment</p> <p>(1) Use the Auxiliary Power Unit (APU) to supply the air pressure of 45 psig at a flow rate of 20 pounds/minute, commercially available.</p> <p>(2) A connection to connect with a pneumatic ground service fitting that is 3.0 inches in diameter.</p> <p>(3) A Stopwatch</p> <p>B. References</p> <p>(1) AMM 24-22-00/201, Electrical Power Control</p> <p>(2) AMM 36-00-00/201, Air Supply-General (Pressurize/Depressurize)</p> <p>C. Prepare for the System Test</p> <p>(1) Make sure these circuit breakers on the overhead circuit breaker panel, P11, are closed:</p> <p>(a) 11D19, START CONT L</p> <p>(b) 11D20, START CONT R</p> <p>(c) 11N27, BULK CARGO HEAT OVRD</p> <p>(d) 11R01, L IND LTS 1</p> <p>(e) 11R21, FWD CARGO HEAT OVERRIDE</p>	

3 9 1 2	EFFECTIVITY	FUNCTIONAL	AIR SUPPLY DISTRIBUTION
		36-11-00-5A	36-002-01 PAGE 1 OF 6 AUG 22/00

MECH	INSP
------	------

- (f) 11R22, AFT CARGO HEAT OVERRIDE
- (g) 11R28, R IND LTS 1
- (h) 11S10, L ENG BLEED IND
- (i) 11S11, L ENG BLEED CONT
- (j) 11S12, L AIR SUPPLY ISLN VLV PWR (or)
ISOL VALVE PWR L
- (k) 11S14, C AIR SUPPLY ISLN VLV PWR (or)
ISOL VALVE PWR C
- (l) 11S15, C AIR SUPPLY ISLN VLV CONT (or)
ISOL VALVE CONT C
- (m) 11S19, R ENG BLEED IND
- (n) 11S20, R ENG BLEED CONT
- (o) 11S21, R AIR SUPPLY ISLN VLV PWR (or)
ISOL VALVE PWR R
- (p) 11S22, R AIR SUPPLY ISLN VLV CONT (or)
ISOL VALVE CONT R
- (q) 11S23, AIR SUPPLY APU BLEED PWR (or)
APU BLEED PWR
- (r) 11S24, AIR SUPPLY APU BLEED CONT(or)
APU BLEED CONT
- (s) 11T19, ANTI-ICE ENG R

(2) Make sure these circuit breakers on the overhead circuit breaker panel, P11, are closed:

- (a) 11A13, L PACK FLOW CONT
- (b) 11A14, AIR SUPPLY ISOL VALVE CONT L
- (c) 11A16, ANTI-ICE ENG L
- (d) 11A26, R PACK FLOW CONT
- (e) 11A27, AIR SUPPLY ISOL ALT R CONT

EFFECTIVITY

FUNCTIONAL

AIR SUPPLY DISTRIBUTION

36-11-00-5A

36-002-01

PAGE 2 OF 6 AUG 22/00

3
9
1
3

SAS



767

TASK CARD

BOEING CARD NO. 36-002-01
AIRLINE CARD NO.

MECH	INSP
------	------

(f) 11A30, ENG ANTI-ICE R ALT

(g) 11A31, WING ANTI-ICE

(3) Make sure this circuit breaker on the left miscellaneous electrical equipment panel, P36, is closed.

(a) 36L7 OR 36K7, AIR SUPPLY BITE

D. Do a Test of the Air Supply Distribution System

(1) Supply electrical power (AMM 24-22-00/201).

(2) Turn the selector switches for the left and right pack on the pilots' overhead panel, P5, to the OFF position.

(a) Make sure the PACK OFF light is on.

(3) Push the FWD, AFT, and BULK CARGO HEAT switch-light on the P5 panel to the off position.

(4) Turn the AIR DEMAND switch on the hydraulic control module of the P5 panel to the OFF position.

(5) Push the L ENG, R ENG, and APU bleed air switch-lights on the P5 panel to the OFF position.

(a) Make sure the OFF light comes on for the L ENG, and R ENG switch-light.

(b) Make sure the flow bar is off for the APU switch-light.

(6) Push the L, C, and R ISLN switch-lights on the P5 panel to the open position.

(a) Make sure the flow bar is on.

(b) Make sure the VALVE lights come on and go off.

(7) Push the WING ANTI-ICE switch-light on the P5 panel to the off position.

(8) Start the Auxiliary Power Unit (APU) (AMM 49-11-00/201).

(9) Pressurize the pneumatic duct to at least 30 psig.

3
9
1
4

EFFECTIVITY



FUNCTIONAL

AIR SUPPLY DISTRIBUTION

36-11-00-5A

36-002-01

PAGE 3 OF 6 AUG 22/00

MECH	INSP

- (10) With a stopwatch, prepare to write a record of the time that is necessary for the duct pressure to decrease from 30 psi to 0 psi.
 - (11) Decrease the air source pressure to zero.
 - (12) When the air source pressure is zero, start the stopwatch.
 - (13) Stop the stopwatch when the duct pressure is zero.
 - (14) Write the time (in seconds) for the duct pressure to decrease to zero.
 - (15) Compare the written results with the graph for airplane leakage on Fig. 503.
- NOTE:** This comparison give an indication of the decrease in system integrity.
- NOTE:** Figure 503 shows a graph of manifold pressure versus decay time for three different manifold pressures. The decay time is the amount of time it takes for the pressure to decrease a given amount. For example, with an initial manifold pressure of 30 psig the decay time for a decrease of 20 psig would be approximately 10 seconds for a system that needs to have the leaks fixed and 20 seconds for a new/refurbished system.
- (a) If the results are above the top curve the system is satisfactory as far as leakage is concerned and is comparable to a new or refurbished pneumatic system.
 - (b) If the results fall between the curves then the pneumatic system leaks more than a new/refurbished system but not more than the recommended value of maximum leakage before the system needs to be refurbished.
 - (c) If the results fall below the bottom curve it is recommended that you find and repair the Leakage.
- 1) Do this task: Air Supply Distribution System Leakage Test (AMM 36-11-00/501).
- (16) Shut down the Auxiliary Power Unit (APU) (AMM 49-11-00/201).
 - (17) Push the L and R ISLN switch-lights on the P5 panel to the closed position.

3
9
1
5

EFFECTIVITY

	FUNCTIONAL	AIR SUPPLY DISTRIBUTION
	36-11-00-5A	36-002-01 PAGE 4 OF 6 AUG 22/00

SAS  **BOEING**
767
TASK CARD

BOEING CARD NO. 36-002-01
AIRLINE CARD NO.

MECH	INSP
------	------

- (a) Make sure the flow bar goes off.
- (b) Make sure the VALVE light comes on and goes off.
- (18) Remove electrical power if it is not necessary (AMM 24-22-00/201).

3
9
1
6

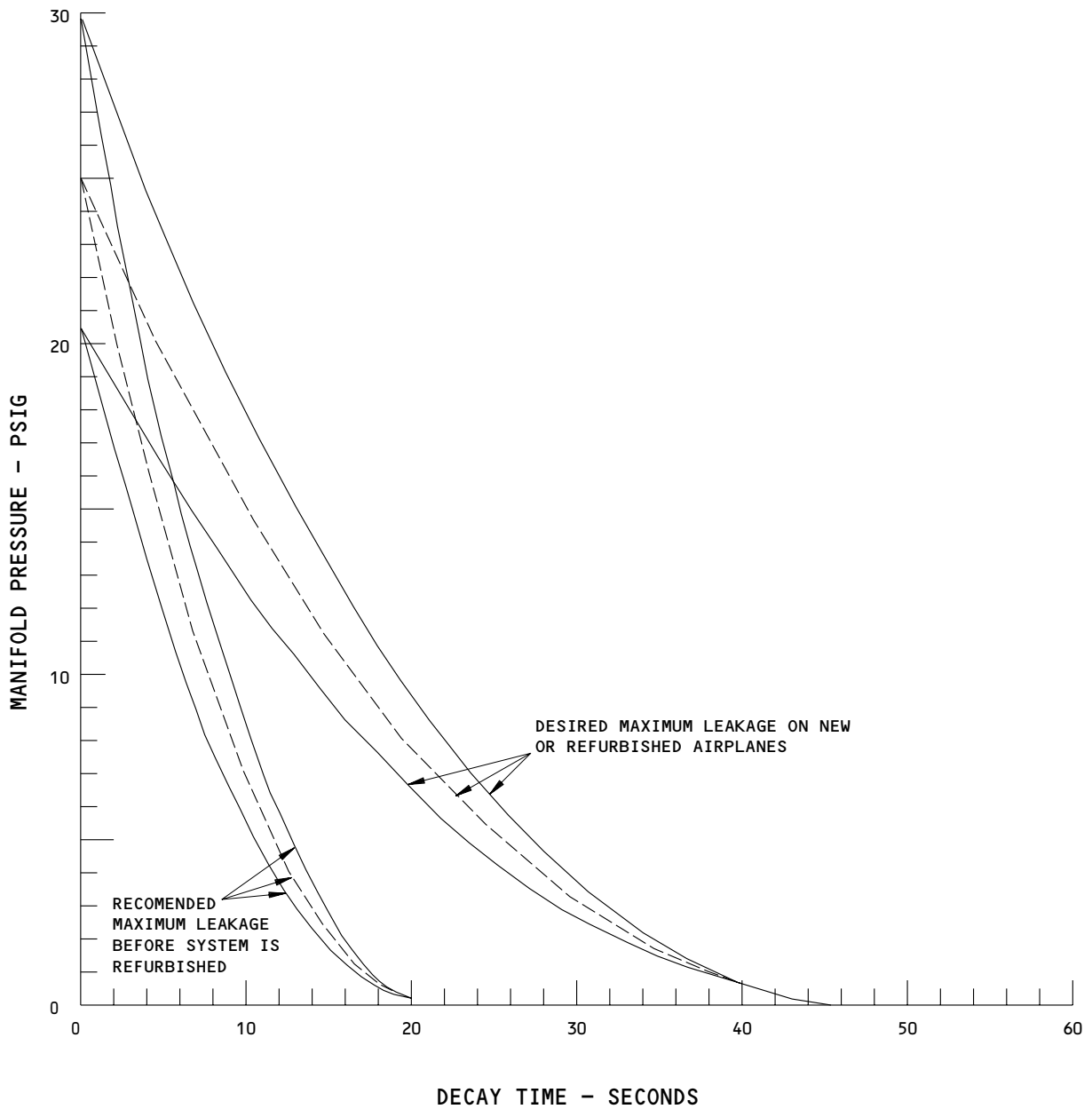
EFFECTIVITY	FUNCTIONAL	AIR SUPPLY DISTRIBUTION
	36-11-00-5A	36-002-01 PAGE 5 OF 6 AUG 22/00

SAS



767
TASK CARD

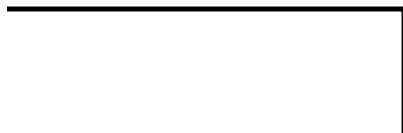
BOEING CARD NO. 36-002-01
AIRLINE CARD NO.



Air Supply Distribution System Gross Leakage Test
Figure 503

3
9
1
7

EFFECTIVITY



FUNCTIONAL

36-11-00-5A

AIR SUPPLY DISTRIBUTION

36-002-01

PAGE 6 OF 6 AUG 22/00

234664

STATION
TAIL NO.
DATE



BOEING CARD NO. 36-003-01
AIRLINE CARD NO.

SKILL ELECT	WORK AREA CREW CABIN	RELATED TASK	INTERVAL 1C	PHASE 11212	MPD REV 002	TASK CARD REVISION AUG 22/08
TASK OPERATIONAL		TITLE CENTER ISOLATION VALVE		STRUCTURAL ILLUSTRATION REFERENCE	APPLICABILITY AIRPLANE ENGINE ALL ALL	
ZONES 212			ACCESS PANELS			

MECH	INSP	MPD ITEM NUMBER 36-11-00-5B	
		<p>OPERATIONALLY CHECK CENTER ISOLATION VALVE BY MONITORING DISAGREEMENT LIGHT.</p> <p>1. <u>Center Isolation Valve Operational Test</u></p> <p>A. References</p> <p>(1) AMM 24-22-00/201, Electric Power Control</p> <p>B. Prepare for the Operational test</p> <p>(1) Supply electrical power (AMM 24-22-00/201).</p> <p>(2) Make sure these circuit breakers on the overhead circuit breaker panel, P11, are closed:</p> <p>(a) 11S14, ISOL VALVE PWR C (or) ISOL VALVE PWR CTR (or) C AIR SUPPLY ISLN VLV PWR</p> <p>(b) 11S15, ISOL VALVE CONT C (or) ISOL VALVE CONT CTR (or) C AIR SUPPLY ISLN VLV CONT</p> <p>C. Do the Air Supply System Operational Test.</p> <p>(1) Do a Test of the Center Isolation Valve</p> <p>(a) Push the C ISLN valve switch-light on the pilots' overhead panel, P5, to the open position.</p> <p>(b) Make sure the VALVE light comes on and goes off.</p> <p>(c) Push the C ISLN valve switch-light on the P5 panel to the closed position.</p>	

EFFECTIVITY		OPERATIONAL 36-11-00-5B	CENTER ISOLATION VALVE 36-003-01	PAGE 1 OF 2	AUG 22/08
-------------	--	-----------------------------------	--	-------------	-----------

3
9
1
8

SAS



767

TASK CARD

BOEING CARD NO. 36-003-01
AIRLINE CARD NO.

MECH	INSP
------	------

- (d) Make sure the VALVE light comes on and goes off.
- (2) Remove electrical power if it is not necessary (AMM 24-22-00/201).

3
9
1
9

EFFECTIVITY



OPERATIONAL

36-11-00-5B

CENTER ISOLATION VALVE

36-003-01

PAGE 2 OF 2 AUG 22/00

STATION
TAIL NO.
DATE



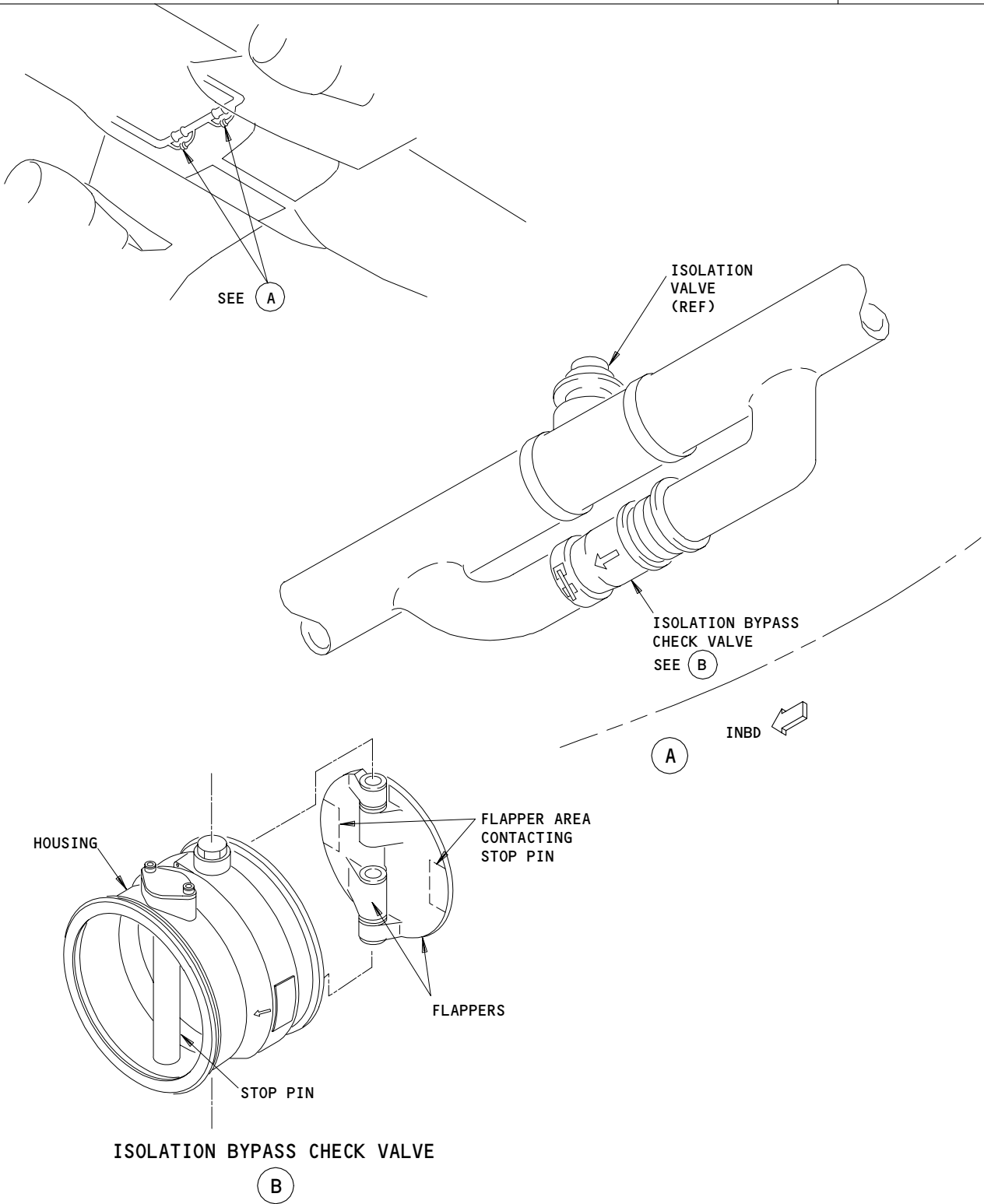
BOEING CARD NO. 36-004-01
AIRLINE CARD NO.

SKILL AIRPL	WORK AREA ECS BAY	RELATED TASK	INTERVAL 4C	PHASE 14848	MPD REV 012	TASK CARD REVISION DEC 22/02
TASK CHECK/INSP		TITLE ISOLATION BYPASS CHECK VALVES		STRUCTURAL ILLUSTRATION REFERENCE	APPLICABILITY AIRPLANE ENGINE ALL ALL	
ZONES 135 136			ACCESS PANELS 193NL 194LR			

MECH	INSP	MPD ITEM NUMBER 36-11-05-6A
		<p>VISUALLY INSPECT THE ISOLATION BYPASS CHECK VALVES FLAPPER AND HINGE PIN FOR WEAR AND SECURITY (REMOVAL FROM DUCT REQUIRED).</p> <p>1. <u>Examine the Isolation Bypass Check Valve</u> (Fig. 601)</p> <p>A. References</p> <p>(1) AMM 36-11-05/401, Isolation Bypass Check Valve</p> <p>B. Procedure</p> <p>(1) Remove the check valve (AMM 36-11-05/401).</p> <p>(2) Examine the check valve for these items:</p> <p>(a) Parts that are loose or missing.</p> <p>(b) Cracks or corrosion on the valve housing.</p> <p>(c) The surfaces that touch between the flapper and the valve body are badly worn.</p> <p>(d) Carbon streaks or dirt particles on the surfaces of the flappers and the valve body that seal (this shows valve leakage in the closed position).</p> <p>(e) Correct installation of the valve flapper and hinge.</p> <p>(3) If you find one of the above conditions, replace the check valve.</p> <p>(4) Install the check valve (AMM 36-11-05/401).</p>

3 9 2 0	EFFECTIVITY	CHECK/INSP	ISOLATION BYPASS CHECK VALVES
		36-11-05-6A	36-004-01 PAGE 1 OF 2 DEC 22/02

SAS  **BOEING**
 767
 TASK CARD



Isolation Bypass Check Valve Inspection Check
 Figure 601

3 9 2 1	EFFECTIVITY		CHECK/INSP	ISOLATION BYPASS CHECK VALVES
	120377		36-11-05-6A	36-004-01 PAGE 2 OF 2 NOV 10/88

STATION
TAIL NO.
DATE



BOEING CARD NO. 36-005-01-1
AIRLINE CARD NO.

SKILL ENGIN	WORK AREA ENGINE 1	RELATED TASK	INTERVAL ENG CNG	PHASE 99XXX	MPD REV 012	TASK CARD REVISION AUG 22/01
TASK CHECK/INSP	TITLE AIR SUPPLY IP CHECK VALVE - ENGINE 1	STRUCTURAL ILLUSTRATION REFERENCE		APPLICABILITY AIRPLANE ENGINE NOTE NOTE		
ZONES 411		ACCESS PANELS 416AR				

MECH	INSP	MPD ITEM NUMBER 36-11-06-6A
		<p>VISUALLY INSPECT THE ENGINE 1 AIR SUPPLY INTERMEDIATE PRESSURE CHECK VALVE POPPET SHAFT AND POPPET FOR WEAR AND SECURITY.</p> <p>ENGINE NOTE: THIS TASK IS APPLICABLE TO THE 4000, 7R4, 80A AND 80C ENGINES.</p> <p>AIRPLANE NOTE: THIS TASK IS APPLICABLE TO ALL AIRPLANE MODELS EXCEPT THE 767-400ER.</p> <p style="text-align: center;"><u>AIR SUPPLY INTERMEDIATE PRESSURE CHECK VALVE - INSPECTION/CHECK</u></p> <p>1. <u>Examine the Air Supply Intermediate Pressure Check Valve (Fig. 601)</u></p> <p>A. References</p> <p>(1) 36-11-06/401, Air Supply IP Check Valve</p> <p>B. The procedure for the Hamilton Standard check valves:</p> <p>(1) Remove the IP check valve (Ref 36-11-06/401).</p> <p>(2) Examine the IP check valve for these items:</p> <p>(a) The valve poppet is in the closed position (the poppet is extended to the inlet of the valve) and cannot be moved freely.</p> <p>(b) The poppet body and rim have cracks or there is poppet damage.</p> <p>(c) Parts that are loose or missing (see the illustration).</p> <p>(d) Blockage that prevents the correct movement of the poppet.</p> <p>(e) Cracks or corrosion on the valve housing.</p>

EFFECTIVITY	CHECK/INSP	AIR SUPPLY IP CHECK VALVE - ENGINE 1
	36-11-06-6A	36-005-01-1 PAGE 1 OF 6 AUG 22/99

3
9
2
2

MECH	INSP

- (f) Clearances between the surfaces that seal on the poppet and the valve body.
- (g) To check the side play for the shaft, do these steps:
 - 1) Extend the poppet even with the flange.
 - 2) Make sure the side play for the shaft is less than 0.055 inch (0.14 cm).
- (h) Make sure the wear is less than 0.01 inch (0.0254 cm) on the poppet and the valve body surfaces that seal.
- (i) Carbon streaks or dirt particles on the surface of the poppet and the valve body that seal (this shows valve leakage in the closed position).
- (j) AIRPLANES WITH CHECK VALVE P/N 773856 AND WITH ANTI-ROTATION TEETH;
To do a check for maximum rotation of the poppet in the open position, do these steps:
 - 1) Mark the position of the poppet on the housing.
 - 2) Rotate the poppet full counter clockwise.
 - 3) Mark the second position of the poppet valve on the housing.
 - 4) Make sure the distance between the two housing marks is less than 1.3 inch (3.30 cm).
 - a) If the measured stance is greater than 1.3 in (3.30 cm), replace the valve.
 - 5) Make sure there are no broken anti-rotation teeth.
- (k) AIRPLANES WITH CHECK VALVE P/N 808556;
To do a check of wear on the open stop and poppet, do these steps:
 - 1) Push the poppet down to the poppet stop.
 - 2) Measure the gap between the poppet and the inlet flange.
 - 3) Make sure the distance is less than 0.725 in (1.84 cm).

3
9
2
3

EFFECTIVITY

--

CHECK/INSP
36-11-06-6A

AIR SUPPLY IP CHECK VALVE - ENGINE 1
36-005-01-1 PAGE 2 OF 6 AUG 22/99

SAS



767

TASK CARD

BOEING CARD NO. 36-005-01-1
AIRLINE CARD NO.

MECH	INSP

- a) If the measured distance is greater than 0.725 in (1.84 cm), replace the valve.
- (3) If you find one or more of the above conditions, replace the IP check valve.
- (4) Install the IP check valve (Ref 36-11-06/401).
- C. The procedure for the Garrett check valve:
 - (1) Remove the IP check valve (Ref 36-11-06/401).
 - (2) Examine the check valve for these items:
 - (a) On the alternative IP check valves, make sure the flange stake pins are installed.
 - (b) Cracks or corrosion on the valve housing.
 - (c) Move the poppet assembly from one side to the other in the valve housing. The poppet assembly must move freely.
 - (d) Clearances between the surfaces of the poppet and the valve housing that seal.
 - (e) Carbon streaks or dirt particles on the surfaces of the poppet and valve housing that seal (this shows valve leakage in the closed position).
 - (3) If you find one or more of the above conditions, replace the IP check valve.
 - (4) Install the IP check valve (Ref 36-11-06/401).

3
9
2
4

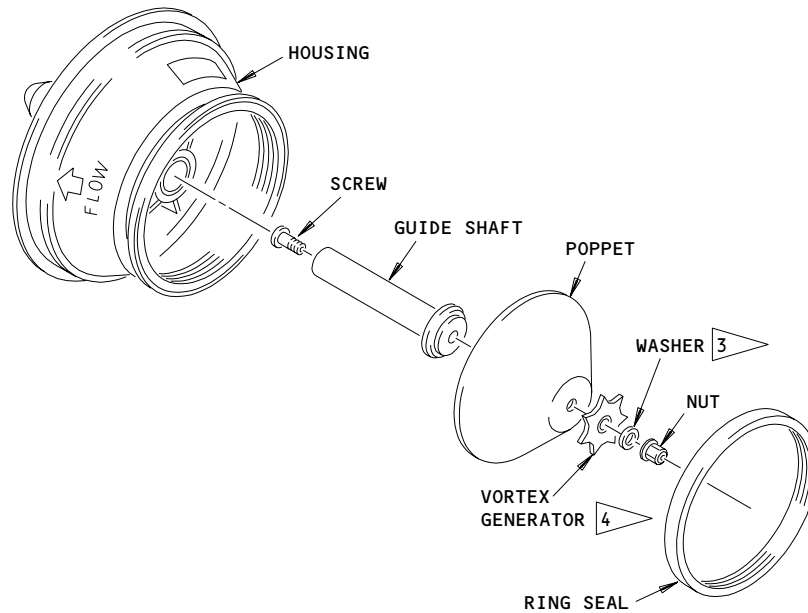
EFFECTIVITY

--

CHECK/INSP
36-11-06-6A

AIR SUPPLY IP CHECK VALVE - ENGINE 1
36-005-01-1 PAGE 3 OF 6 AUG 22/99

SAS



IP CHECK VALVE



- HAMILTON STANDARD CHECK VALVE
- IP CHECK VALVES WITHOUT THE VORTEX GENERATOR
- IP CHECK VALVES WITH THE VORTEX GENERATOR

Intermediate Pressure Check Valve Inspection Check
Figure 601 (Sheet 1)

3
9
2
5

EFFECTIVITY

850352

CHECK/INSP

36-11-06-6A

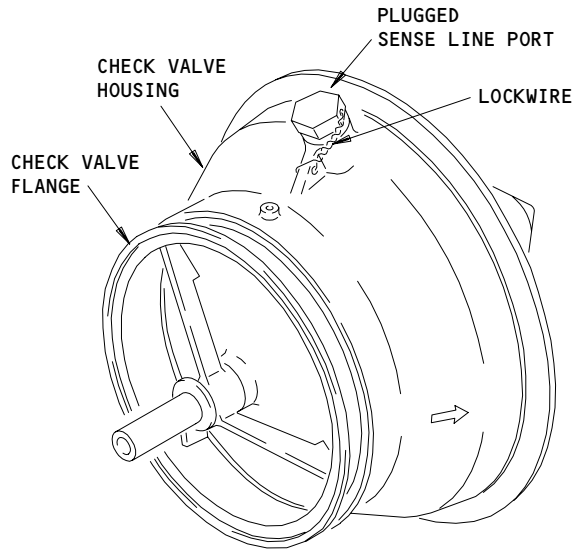
AIR SUPPLY IP CHECK VALVE - ENGINE 1

36-005-01-1 PAGE 4 OF 6 AUG 22/01

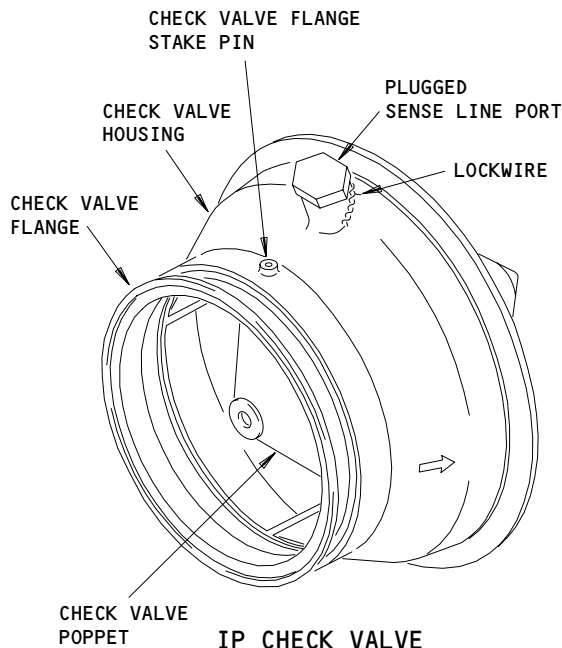
SAS



767
 TASK CARD



IP CHECK VALVE
 (RECOMMENDED)



IP CHECK VALVE
 (ALTERNATIVE)



2 GARRETT CHECK VALVE

Intermediate Pressure Check Valve Inspection Check
 Figure 601 (Sheet 2)

3
 9
 2
 6

EFFECTIVITY

997881

--

CHECK/INSP
36-11-06-6A

AIR SUPPLY IP CHECK VALVE - ENGINE 1
36-005-01-1 PAGE 5 OF 6 AUG 22/99

SAS



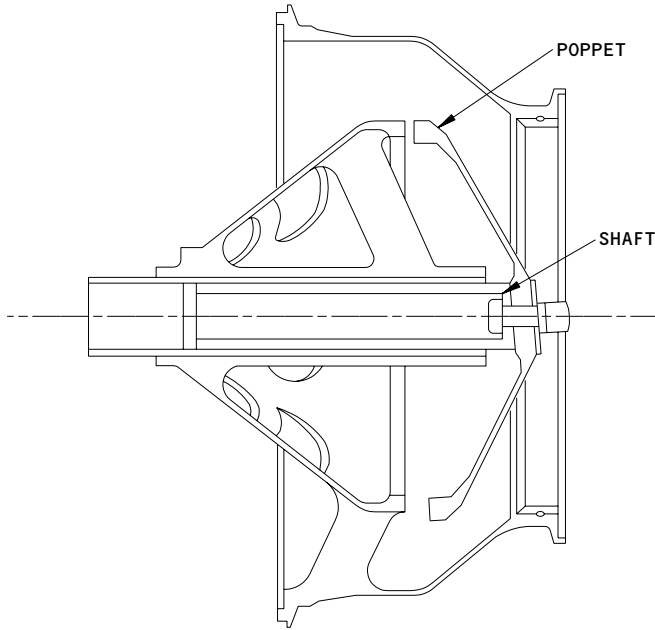
767

TASK CARD

BOEING CARD NO.

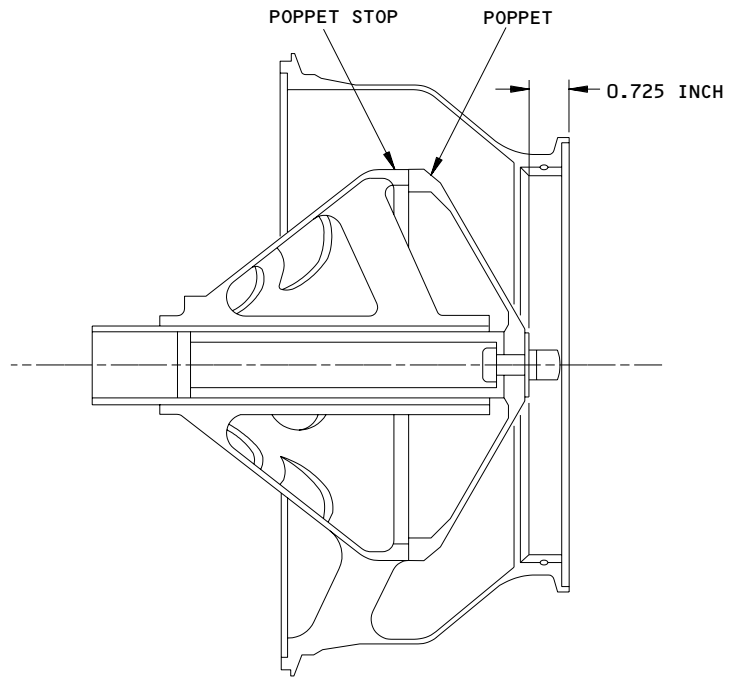
36-005-01-1

AIRLINE CARD NO.



IP CHECK VALVE
(SHAFT PLAY)

(A)



IP CHECK VALVE
(POPPET CLEARANCE)

(A)

Intermediate Pressure Check Valve Inspection/Check
Figure 601 (Sheet 3)

3
9
2
7

EFFECTIVITY

AIRPLANES WITH HAMILTON STANDARD CHECK VALVE

CHECK/INSP

36-11-06-6A

AIR SUPPLY IP CHECK VALVE - ENGINE 1

36-005-01-1 PAGE 6 OF 6 AUG 22/99

STATION
TAIL NO.
DATE



BOEING CARD NO. 36-005-01-2
AIRLINE CARD NO.

SKILL ENGINE	WORK AREA ENGINE 2	RELATED TASK	INTERVAL ENG CNG	PHASE 99XXX	MPD REV 012	TASK CARD REVISION AUG 22/01
TASK CHECK/INSP	TITLE AIR SUPPLY IP CHECK VALVE - ENGINE 2		STRUCTURAL ILLUSTRATION REFERENCE		APPLICABILITY AIRPLANE ENGINE	
ZONES 421		ACCESS PANELS 426AR				

MECH	INSP	MPD ITEM NUMBER 36-11-06-6A
		<p>VISUALLY INSPECT THE ENGINE 2 AIR SUPPLY INTERMEDIATE PRESSURE CHECK VALVE POPPET SHAFT AND POPPET FOR WEAR AND SECURITY.</p> <p>ENGINE NOTE: THIS TASK IS APPLICABLE TO THE 4000, 7R4, 80A AND 80C ENGINES.</p> <p>AIRPLANE NOTE: THIS TASK IS APPLICABLE TO ALL AIRPLANE MODELS EXCEPT THE 767-400ER.</p> <p style="text-align: center;"><u>AIR SUPPLY INTERMEDIATE PRESSURE CHECK VALVE - INSPECTION/CHECK</u></p> <p>1. <u>Examine the Air Supply Intermediate Pressure Check Valve (Fig. 601)</u></p> <p>A. References</p> <p>(1) 36-11-06/401, Air Supply IP Check Valve</p> <p>B. The procedure for the Hamilton Standard check valves:</p> <p>(1) Remove the IP check valve (Ref 36-11-06/401).</p> <p>(2) Examine the IP check valve for these items:</p> <p>(a) The valve poppet is in the closed position (the poppet is extended to the inlet of the valve) and cannot be moved freely.</p> <p>(b) The poppet body and rim have cracks or there is poppet damage.</p> <p>(c) Parts that are loose or missing (see the illustration).</p> <p>(d) Blockage that prevents the correct movement of the poppet.</p> <p>(e) Cracks or corrosion on the valve housing.</p>

3 9 2 8	EFFECTIVITY	CHECK/INSP	AIR SUPPLY IP CHECK VALVE - ENGINE 2
		36-11-06-6A	36-005-01-2 PAGE 1 OF 6 APR 22/01

MECH	INSP

- (f) Clearances between the surfaces that seal on the poppet and the valve body.
- (g) To check the side play for the shaft, do these steps:
 - 1) Extend the poppet even with the flange.
 - 2) Make sure the side play for the shaft is less than 0.055 inch (0.14 cm).
- (h) Make sure the wear is less than 0.01 inch (0.0254 cm) on the poppet and the valve body surfaces that seal.
- (i) Carbon streaks or dirt particles on the surface of the poppet and the valve body that seal (this shows valve leakage in the closed position).
- (j) AIRPLANES WITH CHECK VALVE P/N 773856 AND WITH ANTI-ROTATION TEETH;
To do a check for maximum rotation of the poppet in the open position, do these steps:
 - 1) Mark the position of the poppet on the housing.
 - 2) Rotate the poppet full counter clockwise.
 - 3) Mark the second position of the poppet valve on the housing.
 - 4) Make sure the distance between the two housing marks is less than 1.3 inch (3.30 cm).
 - a) If the measured stance is greater than 1.3 in (3.30 cm), replace the valve.
 - 5) Make sure there are no broken anti-rotation teeth.
- (k) AIRPLANES WITH CHECK VALVE P/N 808556;
To do a check of wear on the open stop and poppet, do these steps:
 - 1) Push the poppet down to the poppet stop.
 - 2) Measure the gap between the poppet and the inlet flange.
 - 3) Make sure the distance is less than 0.725 in (1.84 cm).

3
9
2
9

EFFECTIVITY

--

CHECK/INSP	AIR SUPPLY IP CHECK VALVE - ENGINE 2
36-11-06-6A	36-005-01-2 PAGE 2 OF 6 APR 22/01

MECH	INSP
------	------

- a) If the measured distance is greater than 0.725 in (1.84 cm), replace the valve.
- (3) If you find one or more of the above conditions, replace the IP check valve.
- (4) Install the IP check valve (Ref 36-11-06/401).
- C. The procedure for the Garrett check valve:
 - (1) Remove the IP check valve (Ref 36-11-06/401).
 - (2) Examine the check valve for these items:
 - (a) On the alternative IP check valves, make sure the flange stake pins are installed.
 - (b) Cracks or corrosion on the valve housing.
 - (c) Move the poppet assembly from one side to the other in the valve housing. The poppet assembly must move freely.
 - (d) Clearances between the surfaces of the poppet and the valve housing that seal.
 - (e) Carbon streaks or dirt particles on the surfaces of the poppet and valve housing that seal (this shows valve leakage in the closed position).
 - (3) If you find one or more of the above conditions, replace the IP check valve.
 - (4) Install the IP check valve (Ref 36-11-06/401).

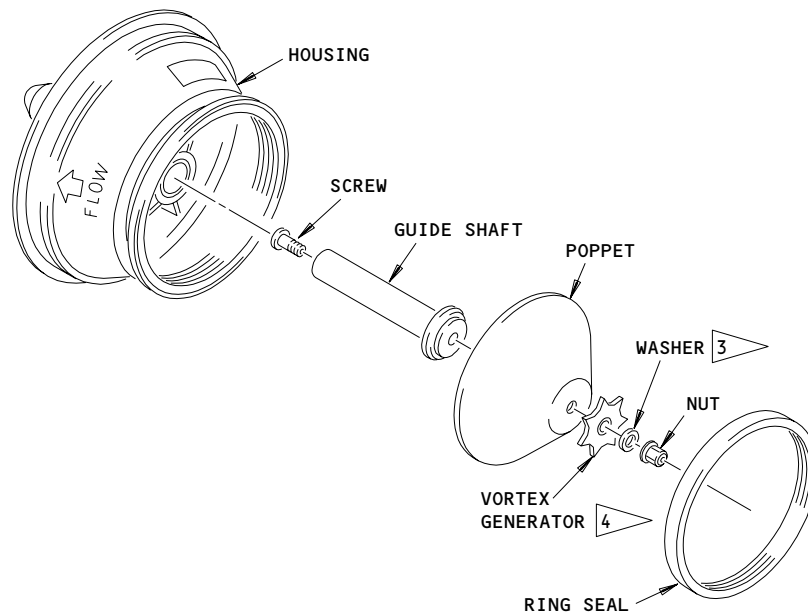
3
9
3
0

EFFECTIVITY

CHECK/INSP
36-11-06-6A




AIR SUPPLY IP CHECK VALVE - ENGINE 2
36-005-01-2 PAGE 3 OF 6 APR 22/01

SAS



IP CHECK VALVE



-  HAMILTON STANDARD CHECK VALVE
-  IP CHECK VALVES WITHOUT THE VORTEX GENERATOR
-  IP CHECK VALVES WITH THE VORTEX GENERATOR

Intermediate Pressure Check Valve Inspection Check
Figure 601 (Sheet 1)

3
9
3
1

EFFECTIVITY

850352

CHECK/INSP

36-11-06-6A

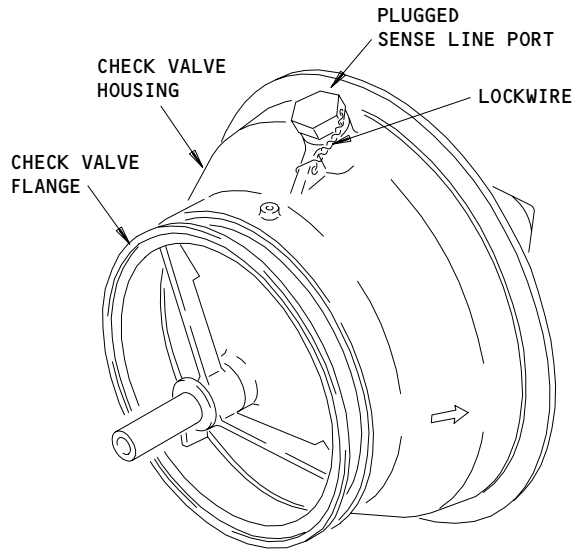
AIR SUPPLY IP CHECK VALVE - ENGINE 2

36-005-01-2 PAGE 4 OF 6 AUG 22/01

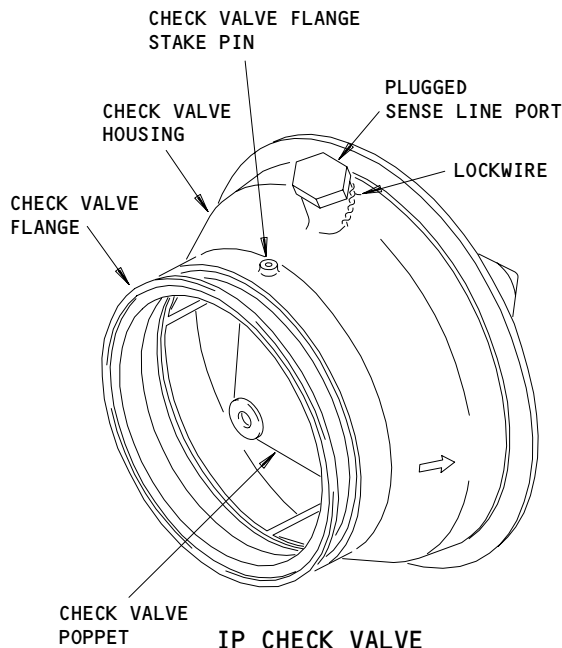
SAS



767
 TASK CARD



IP CHECK VALVE
 (RECOMMENDED)



IP CHECK VALVE
 (ALTERNATIVE)



2 GARRETT CHECK VALVE

Intermediate Pressure Check Valve Inspection Check
 Figure 601 (Sheet 2)

3
 9
 3
 2

EFFECTIVITY

997881

--

CHECK/INSP
 36-11-06-6A

AIR SUPPLY IP CHECK VALVE - ENGINE 2
 36-005-01-2 PAGE 5 OF 6 AUG 22/99

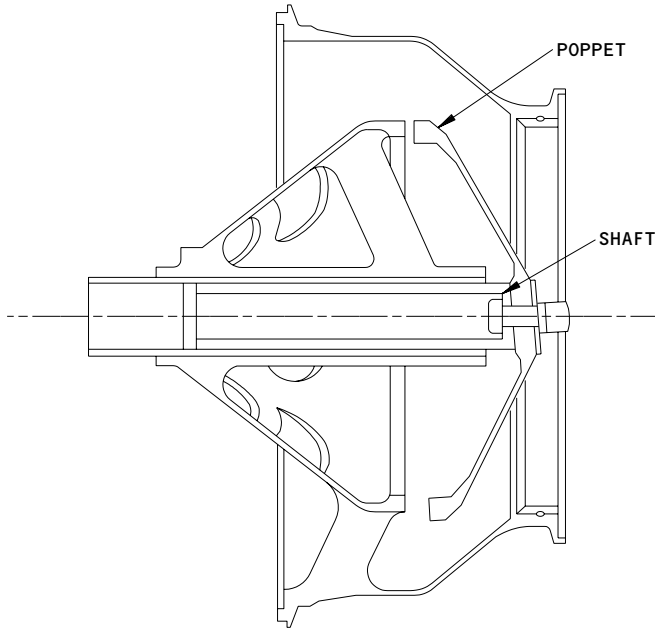
SAS



767

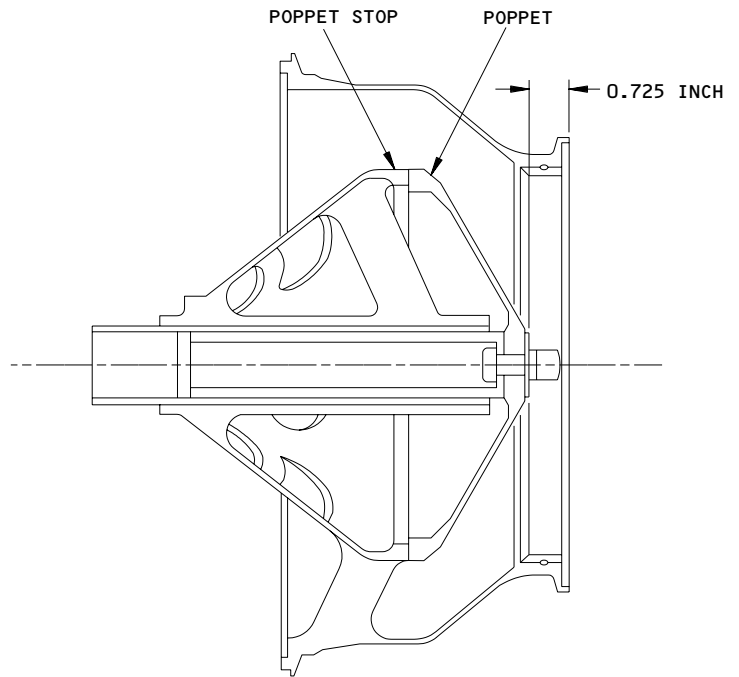
TASK CARD

BOEING CARD NO. 36-005-01-2
AIRLINE CARD NO.



IP CHECK VALVE (SHAFT PLAY)

(A)



IP CHECK VALVE (POPPET CLEARANCE)

(A)

Intermediate Pressure Check Valve Inspection/Check Figure 601 (Sheet 3)

3
9
3
3

EFFECTIVITY

AIRPLANES WITH HAMILTON STANDARD CHECK VALVE

CHECK/INSP

36-11-06-6A

AIR SUPPLY IP CHECK VALVE - ENGINE 2

36-005-01-2 PAGE 6 OF 6 AUG 22/99

STATION
TAIL NO.
DATE



BOEING CARD NO. 36-007-01
AIRLINE CARD NO.

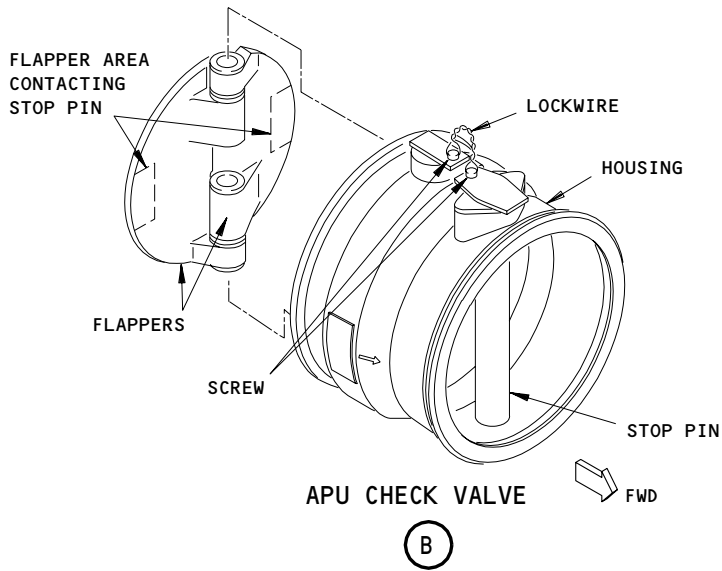
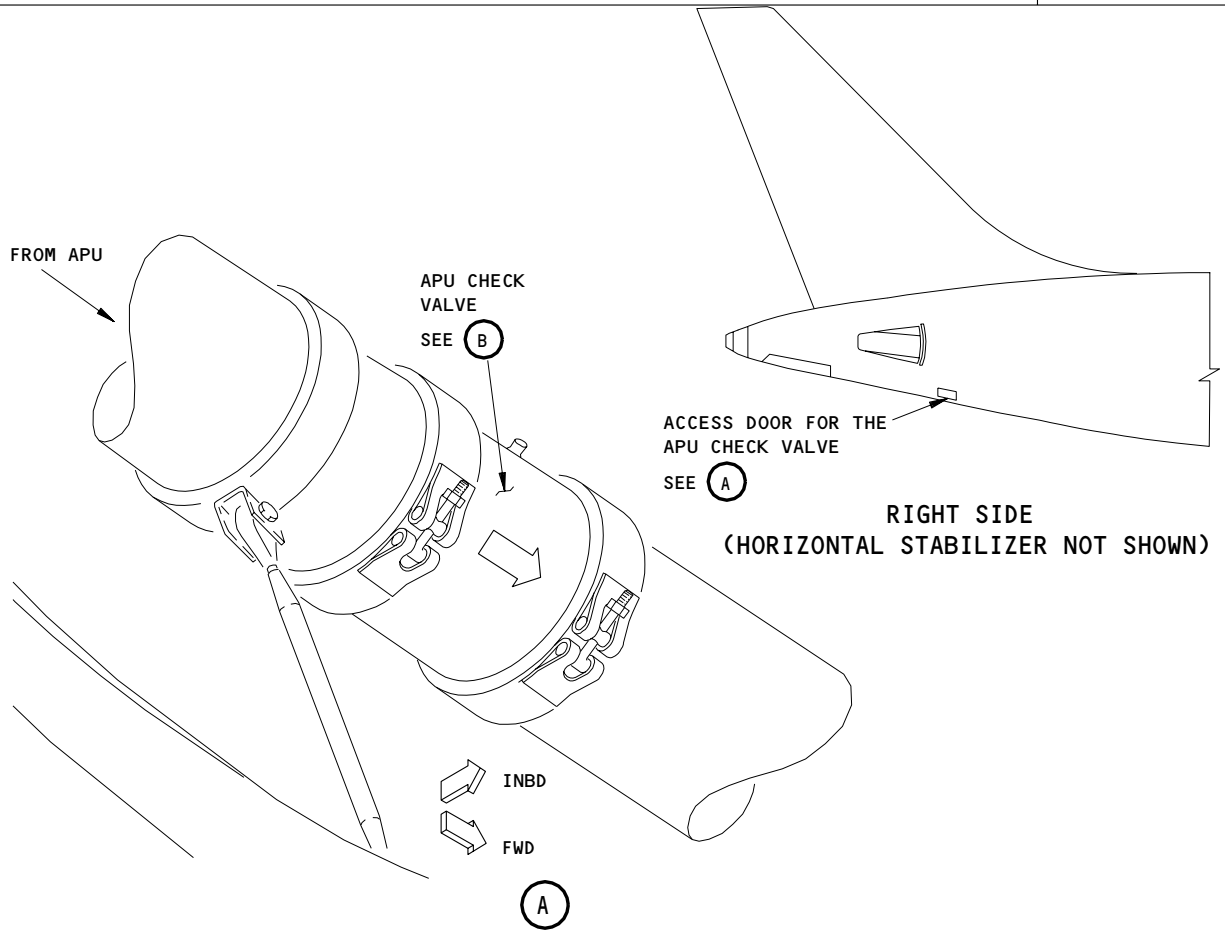
SKILL AIRPL	WORK AREA EMPENNAGE	RELATED TASK	INTERVAL 4C	PHASE 14848	MPD REV 017	TASK CARD REVISION APR 22/04
TASK CHECK/INSP		TITLE APU AIR SUPPLY CHECK VALVE		STRUCTURAL ILLUSTRATION REFERENCE		APPLICABILITY AIRPLANE ENGINE ALL ALL
ZONES 312			ACCESS PANELS 312AR			

MECH	INSP		MPD ITEM NUMBER 36-11-11-6A
		<p>VISUALLY INSPECT THE APU AIR SUPPLY CHECK VALVE FLAPPER AND HINGE PIN FOR WEAR AND SECURITY (REMOVAL FROM DUCT REQUIRED)</p> <p>1. <u>Examine the APU Air Supply Check Valve</u> (Fig. 601)</p> <p>A. References</p> <p>(1) AMM 36-11-11/401, APU Check Valve</p> <p>B. Procedure</p> <p>(1) Remove the APU check valve (AMM 36-11-11/401).</p> <p>(2) Examine the APU check valve for these conditions:</p> <p>(a) The incorrect installation of the screws.</p> <p>(b) The incorrect installation of the valve flappers and the hinge pin.</p> <p>(c) The incorrect installation of the lockwire between the retainer screws for the hinge pin and the stop pin.</p> <p>(d) Corrosion or cracks on the valve housing</p> <p>(e) Deterioration, contamination, or carbon on the seal surfaces of the flappers and the valve body</p> <p>(3) If one of the above conditions occur, replace the APU check valve.</p> <p>(4) If the thickness of the flappers in the area that touches the stop pin is less than 0.060 inch, replace the APU check valve.</p> <p>(5) Tighten all the loose screws.</p> <p>(6) Install the APU check valve (AMM 36-11-11/401).</p>	

EFFECTIVITY		CHECK/INSP 36-11-11-6A	APU AIR SUPPLY CHECK VALVE 36-007-01	PAGE 1 OF 2 APR 22/04
-------------	--	----------------------------------	--	-----------------------

3
9
3
4

SAS **BOEING**
 767
 TASK CARD



APU Air Supply Check Valve Inspection Check
 Figure 601

3
 9
 3
 5

EFFECTIVITY

120488

--

CHECK/INSP
 36-11-11-6A

APU AIR SUPPLY CHECK VALVE
 36-007-01 PAGE 2 OF 2 DEC 10/98

STATION
TAIL NO.
DATE



BOEING CARD NO. 36-008-01
AIRLINE CARD NO.

SKILL ELECT	WORK AREA MAIN EE CTR	RELATED TASK	INTERVAL 1C	PHASE 11212	MPD REV 017	TASK CARD REVISION AUG 22/04
TASK OPERATIONAL		TITLE AIR SUPPLY BITE MODULE		STRUCTURAL ILLUSTRATION REFERENCE	APPLICABILITY AIRPLANE ENGINE NOTE ALL	
ZONES 119		ACCESS PANELS 119AL				

MECH	INSP	MPD ITEM NUMBER 36-11-16-5A				
		<p>PERFORM BITE TEST ON THE AIR SUPPLY SYSTEM.</p> <p>NOTE: USE AIR SUPPLY BITE MODULE FOR 767-200/300.</p> <p>AIRPLANE NOTE: ON 767-200/-300 AIRPLANES, TASK IS APPLICABLE TO BITE MODULE P/N S210T120-57 AND SUBSEQUENT P/N.</p> <p>1. <u>Bite Test for FAMV or FATS Faults on The Air Supply Bite Module</u></p> <p>A. References</p> <p>(1) AMM 06-41-00/201, Fuselage Access Door and Panels</p> <p>(2) AMM 24-22-00/201, Electrical Power - General</p> <p>(3) AMM 36-00-00/201, Pneumatic Power - General</p> <p>B. Access</p> <p>(1) Location Zones</p> <p style="padding-left: 40px;">120 Main Equipment Center (RH side)</p> <p>(2) Access Panels</p> <p style="padding-left: 40px;">119AL Electrical Access Door</p> <p>C. Prepare for the Test</p> <p>(1) Depressurize the pneumatic system (AMM 36-00-00/201).</p> <p>(2) Supply electrical power (AMM 24-22-00/201).</p> <p>(3) Open the door 119AL (AMM 06-41-00/201).</p>				

3 9 3 6	EFFECTIVITY	OPERATIONAL	AIR SUPPLY BITE MODULE
		36-11-16-5A	36-008-01 PAGE 1 OF 4 AUG 22/04

MECH	INSP
------	------

- (4) Make sure this circuit breaker on the left misc equipment panel, P36, is closed:
 - (a) 36L7, AIR SUPPLY BITE

D. BITE Test (Figure 501)

NOTE: Use of the BITE module is not recommended for part numbers S210T120-47 and less.

- (1) Push and hold the "PRESS TEST" button on the BITE module.

NOTE: This does a test of all the indicator lights on the BITE module display panel. The lights should remain illuminated until the PRESS TEST button is released.

- (2) Make sure all the indicator lights are on.
- (3) Release the "PRESS TEST" button on the BITE module.
- (4) Push and release the "BITE STEP" button.

NOTE: BITE STEP is used to show faults stored in fault memory. Current flight (the time before the last ground-to-air transition) faults are shown when the BITE STEP is first pushed. Each subsequent push of the button shows the faults for each of the previous seven flights. A "NO FAULT" light will illuminate for 10 seconds if no faults are stored.

- (a) Keep a record of all the faults.

NOTE: If the NO FAULT light does not show, continue to push the "BITE STEP" button until no lights come on.

3
9
3
7

EFFECTIVITY

OPERATIONAL

AIR SUPPLY BITE MODULE

36-11-16-5A

36-008-01

PAGE 2 OF 4 AUG 22/03

MECH	INSP

(5) Push the "VERIFY" button.

NOTE: This test will confirm that the Air Supply LRU's are electrically connected correctly. VERIFY does a test for open wires between the LRU and the BITE module and makes sure the sensors/switches are in their unpressurized state (e.g., the HPSOV position switch is closed, the pressures sensor reads 0 psig etc.). Faults will be shown immediately. Parts of this test will be prevented if the manifold is pressurized.

(a) Keep a record of all the faults.

NOTE: Continue to push the "VERIFY" button until no lights come on.

(6) Repair all FATS and FAMV faults.

NOTE: On the air supply BITE module front panel, FATS faults are indicated by the FAS or FAN AIR SENSOR light. FAMV faults are indicated by the FAV or FAN AIR VALVE light.

E. Put the Airplane Back To Its Usual Position

(1) Close the door 119AL (AMM 06-41-00/201).

(2) Remove electrical power if it is not necessary (AMM 24-22-00/201).

3
9
3
8

EFFECTIVITY

--

OPERATIONAL

36-11-16-5A

AIR SUPPLY BITE MODULE

36-008-01

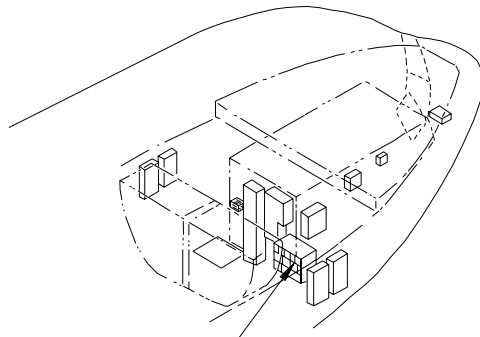
PAGE 3 OF 4 AUG 22/03

SAS



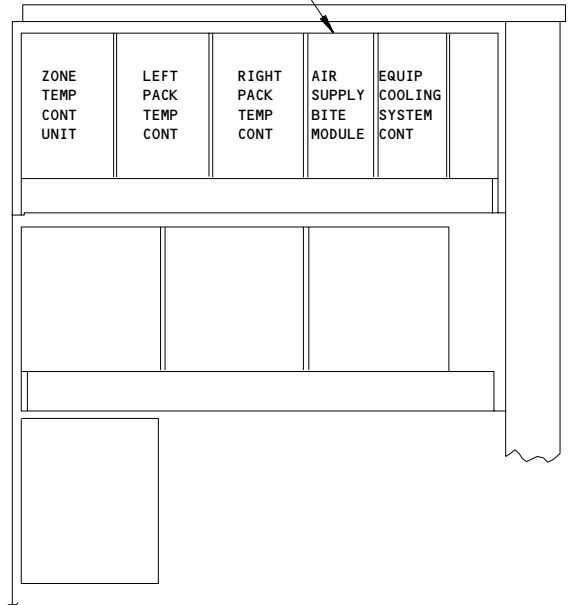
767
TASK CARD

BOEING CARD NO. 36-008-01
AIRLINE CARD NO.

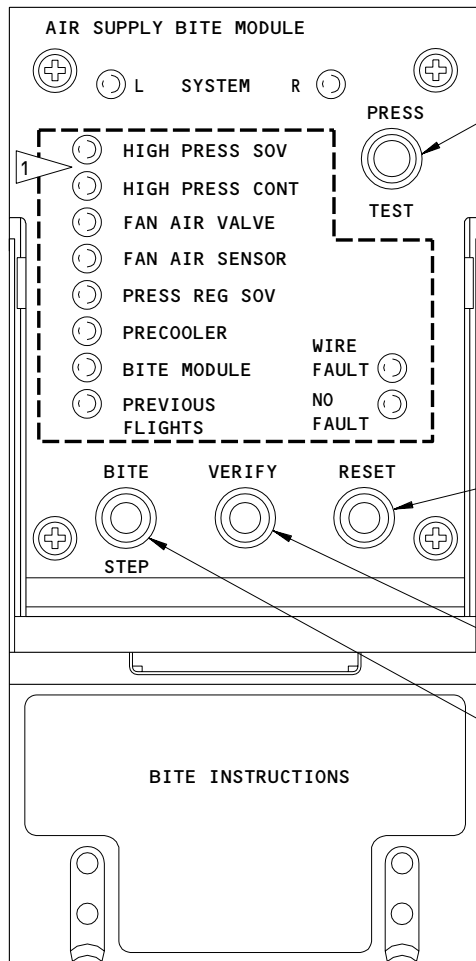


ELECTRICAL EQUIPMENT CENTER RACK, E-3
SEE (A)

AIR SUPPLY BITE MODULE
SEE (B)



ELECTRICAL EQUIPMENT CENTER RACK, E-3
(A)



AIR SUPPLY BITE MODULE
(B)

- 1 ON AIRPLANES WITH BITE MODULE P/N S210T120-57 (H/S 773461-10) OR LESS
- 2 ON AIRPLANES WITH BITE MODULE P/N S210T120-67 (H/S 804401-2) OR ABOVE

Air Supply BITE Module
Figure 501

3 9 3 9	EFFECTIVITY	OPERATIONAL	AIR SUPPLY BITE MODULE
	628344	36-11-16-5A	36-008-01 PAGE 4 OF 4 AUG 22/04

STATION
TAIL NO.
DATE



BOEING CARD NO. 36-008-02
AIRLINE CARD NO.

SKILL ELECT	WORK AREA CREW CABIN	RELATED TASK	INTERVAL 1C	PHASE 11212	MPD REV 017	TASK CARD REVISION AUG 22/04
TASK OPERATIONAL		TITLE AIR SUPPLY PRECOOLING SYSTEM		STRUCTURAL ILLUSTRATION REFERENCE	APPLICABILITY AIRPLANE ENGINE NOTE ALL	
ZONES 411 421			ACCESS PANELS 119AL			

MECH	INSP		MPD ITEM NUMBER 36-11-16-5B
		<p>FAN AIR MODULATING VALVE AND FAN AIR TEMPERATURE SENSOR OPERATIONAL CHECK.</p> <p>AIRPLANE NOTE: TASK APPLICABLE TO AIRPLANES WITH A BITE MODULE P/N S210T120-47 AND PRIOR P/N.</p> <p>1. <u>Fan Air Modulating Valve and Fan Air Temperature Sensor Test</u></p> <p>A. Equipment</p> <p>(1) Air or Nitrogen Source</p> <p>(2) Supply pressure gage - 0-50 psig</p> <p>(3) Pressure hose - 0-50 psig</p> <p>B. Consumable Materials</p> <p>(1) D00006 Anti-seize Compound - Bostik Never-Seez</p> <p>C. References</p> <p>(1) AMM 24-22-00/201, Electrical Power - General</p> <p>(2) AMM 36-00-00/201, Pneumatic Power - General</p> <p>(3) AMM 36-11-16/401, Fan Air Modulating Valve</p> <p>(4) AMM 36-11-17/401, Fan Air Temperature Sensor</p> <p>(5) AMM 71-11-04/201, Fan Cowl Panel</p> <p>(6) AMM 71-11-06/201, Core Cowl Panel</p> <p>(7) AMM 78-31-00/201, Thrust Reverser System</p>	

3 9 4 0	EFFECTIVITY	OPERATIONAL	AIR SUPPLY PRECOOLING SYSTEM
		36-11-16-5B	36-008-02 PAGE 1 OF 6 AUG 22/04

MECH	INSP

D. Access

(1) Location Zones

- 410 No. 1 Power Plant (Left engine)
- 420 No. 2 Power Plant (Right engine)

(2) Access Panels (PW 4000 or PW JT9D ENGINES)

- 414AR Right Left Fan Cowl (Left engine)
- 416AR Right Thrust Reverser (Left engine)
- 418AR Right Core Cowl (Left engine)

- 424AR Right Fan Cowl (Right engine)
- 426AR Right Thrust Reverser (Right engine)
- 428AR Right Core Cowl (Right engine)

E. Prepare for the Test

WARNING: YOU MUST REMOVE THE PRESSURE FROM THE PNEUMATIC DUCTS BEFORE YOU REMOVE A PNEUMATIC SYSTEM COMPONENT. IF YOU DO NOT REMOVE THE PRESSURE FROM THE PNEUMATIC DUCTS, HOT HIGH PRESSURE AIR CAN CAUSE INJURIES TO PERSONS OR DAMAGE TO EQUIPMENT.

- (1) Depressurize the pneumatic system (AMM 36-00-00/201).
- (2) Supply electrical power (AMM 24-22-00/201).
- (3) AIRPLANES WITH PW 4000 OR PW JT9D ENGINES;
Get access to the Fan Air Modulating Valve (FAMV) on the 'right' side of the associated (left/right) engine:

WARNING: DO THE DEACTIVATION PROCEDURE TO PREVENT THE OPERATION OF THE THRUST REVERSER. THE ACCIDENTAL OPERATION OF THE THRUST REVERSER CAN CAUSE INJURIES TO PERSONS AND DAMAGE TO EQUIPMENT.

- (a) Do the deactivation procedure for the thrust reversers for ground maintenance (AMM 78-31-00/201).
- (b) Open the associated right fan cowl panel (414AR/424AR) (AMM 71-11-04/201).

EFFECTIVITY

--

OPERATIONAL

AIR SUPPLY PRECOOLING SYSTEM

36-11-16-5B

36-008-02

PAGE 2 OF 6 DEC 22/03

3
9
4
1

MECH	INSP
------	------

(c) Open the associated right core cowl panel (418AR/428AR) (AMM 71-11-06/201).

WARNING: OBEY THE INSTRUCTIONS IN THE PROCEDURE TO OPEN THE THRUST REVERSERS. IF YOU DO NOT OBEY THE INSTRUCTIONS, INJURIES TO PERSONS AND DAMAGE TO EQUIPMENT CAN OCCUR.

(d) Open the associated right thrust reverser (416AR/426AR) (AMM 78-31-00/201).

F. FAMV/FATS Operational Test with a Ground Source or the APU (Figure 502)

NOTE: During the test you will be asked some questions. Each question will have a yes or no answer. Each yes or no answer gives a recommended action, for example: NO, replace the FAMV (AMM 36-11-16/401). You can continue with the test without doing the action if you want to see other characteristics of the test. However, you should do the recommended action after you complete the test.

- (1) Look at the FAMV position indicator. Is the FAMV in the fully open position?
 - (a) NO, replace the FAMV (AMM 36-11-16/401).
 - (b) YES, continue.
- (2) Do a check of the sense lines to and from the FATS and FAMV.
 - (a) Repair all loose and/or damaged sense lines.
- (3) Push the ECS button on the EICAS Maintenance Module of the accessory panel to show the ECS maintenance page on the lower EICAS screen.
- (4) Supply pneumatic power with a ground source or the APU (AMM 36-00-00/201).
- (5) Open the Left, Center and Right Isolation Valves.
- (6) Make sure the left and right MANIFOLD PRESS increases to at least 20 psig.
- (7) Put the applicable L(R) ENG BLEED switch to the on position.

EFFECTIVITY

OPERATIONAL

AIR SUPPLY PRECOOLING SYSTEM

36-11-16-5B

36-008-02

PAGE 3 OF 6 DEC 22/03

3
9
4
2

MECH	INSP

(8) Manually wrench open the PRSOV to pressurize the bleed duct.

(9) Make sure the FAMV goes from the full open to the full closed position within 15 seconds as the ENG DUCT PRESS increases.

NOTE: The FAMV should close within 15 seconds unless the PRECOOLER OUTLET TEMPERATURE is greater than approximately 300°F, at which point the valve may not close because it is on temperature control by the Fan Air Temperature Sensor. If the PRECOOLER OUTLET TEMPERATURE is greater (or suspected to be greater) than 300°F, allow the engine and ducting sufficient time to cool and repeat the test.

(10) If the FAMV does not close, apply soap solution to the supply and signal line to the FAMV and make sure there are no leaks.

NOTE: Even a very small leak in the Fan Air Temperature signal line will prevent the FAMV from closing.

(11) Depressurize the pneumatic system (AMM 36-00-00/201)

(12) Close the center isolation valve, if required.

(13) If there are no leaks and the FAMV still does not close, Continue.

G. FAMV/FATS Operational Test with a Nitrogen Source (Or Equivalent) (Figure 502)

(1) Remove the supply pressure sense line and fan air temperature sense line to the FAMV.

(2) Install a nitrogen source (or equivalent) to the supply pressure sense line and fan air temperature sense line ports on the FAMV.

(3) Slowly apply 15 ±1 psig.

NOTE: The FAMV should close at approximately 10 psig.

(4) Did the FAMV close at less than or equal to 16 psig?

(a) YES, the FAMV is satisfactory. Replace the FATS (AMM 36-11-17/401).

(b) NO, replace the FAMV (AMM 36-11-16/401).

3
9
4
3

EFFECTIVITY

--

OPERATIONAL
36-11-16-5B

AIR SUPPLY PRECOOLING SYSTEM
36-008-02 PAGE 4 OF 6 DEC 22/03

SAS



767

TASK CARD

BOEING CARD NO. 36-008-02
AIRLINE CARD NO.

MECH	INSP
------	------

H. Put the Airplane Back to Its Usual Condition

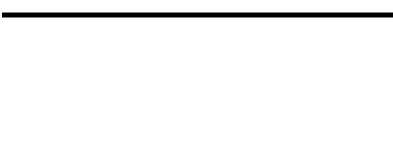
- (1) Remove the nitrogen source, supply pressure gage, hoses and fittings from the supply pressure sense line and fan air temperature sense line ports.
- (2) Apply antiseize compound and connect the supply pressure sense line and fan air temperature sense line to the FAMV.
- (3) AIRPLANES WITH PW 4000 OR PW JT9D ENGINES;
Close up the access to the FAMV on the 'right' side of the associated (left/right) engine:

WARNING: OBEY THE INSTRUCTIONS IN THE PROCEDURE TO CLOSE THE THRUST REVERSERS. IF YOU DO NOT OBEY THE INSTRUCTIONS, INJURIES TO PERSONS AND DAMAGE TO EQUIPMENT CAN OCCUR.

- (a) Close the associated right thrust reverser (416AR/426AR) (AMM 78-31-00/201).
- (b) Close the associated right core cowl panel (418AR/428AR) (AMM 71-11-06/201).
- (c) Close the associated right fan cowl panel (414AR/424AR) (AMM 71-11-04/201).
- (d) Do the activation procedure for the thrust reversers (AMM 78-31-00/201).
- (4) Remove electrical power if it is not necessary (AMM 24-22-00/201).

3
9
4
4

EFFECTIVITY



OPERATIONAL

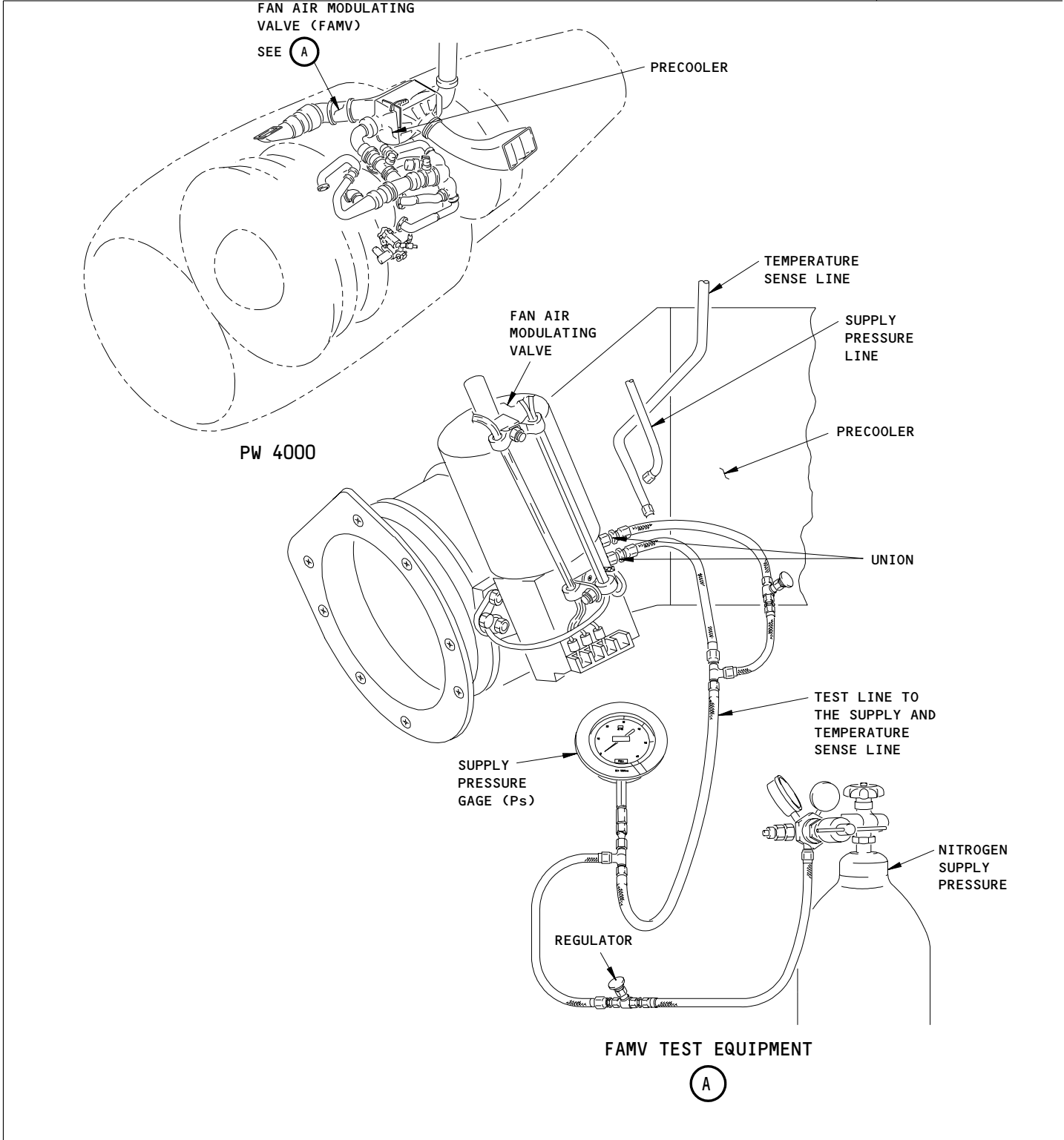
36-11-16-5B

AIR SUPPLY PRECOOLING SYSTEM

36-008-02

PAGE 5 OF 6 DEC 22/03

SAS **BOEING** 767
 TASK CARD



Fan Air Modulating Valve
 Figure 502

3 9 4 5	EFFECTIVITY	OPERATIONAL	AIR SUPPLY PRECOOLING SYSTEM
	W66538 AIRPLANES WITH PW 4000 ENGINES	36-11-16-5B	36-008-02 PAGE 6 OF 6 DEC 22/03

STATION
TAIL NO.
DATE



BOEING CARD NO. 36-009-01-1
AIRLINE CARD NO.

SKILL ENGIN	WORK AREA STRUT 1	RELATED TASK	INTERVAL 4C	PHASE 14848	MPD REV 013	TASK CARD REVISION APR 22/07
TASK FUNCTIONAL		TITLE AIR SUPPLY THERMAL OVERTEMP SWITCH		STRUCTURAL ILLUSTRATION REFERENCE		APPLICABILITY AIRPLANE ENGINE NOTE ALL
ZONES 434			ACCESS PANELS 415AL 416AR 434AL			

MECH	INSP	MPD ITEM NUMBER 36-22-00-5A	
		<p>FUNCTIONALLY CHECK (OFF-AIRCRAFT) THE SETTING OF THE AIR SUPPLY THERMAL OVERTEMP SWITCH (LEFT ENGINE).</p> <p>AIRPLANE NOTE: TASK APPLICABLE TO ALL AIRPLANE MODELS EXCEPT THE 767-400ER.</p> <p>THE FOLLOWING PROCEDURE APPLIES TO THE ON-AIRCRAFT PORTION OF THIS TASK (CIRCUIT VERIFICATION). OFF-AIRCRAFT AIR SUPPLY THERMAL OVER-TEMPERATURE SWITCH PROCEDURES ARE FOUND IN THE SUPPLIER COMPONENT MAINTENANCE MANUAL DOCUMENT.</p> <p>1. <u>Operational Test - Left Engine Air Supply Temperature Indicating System</u></p> <p>A. References</p> <ul style="list-style-type: none"> (1) AMM 24-22-00/201, Electrical Power Control (2) AMM 27-81-00/201, Leading Edge Slat System (3) AMM 36-23-00/501, Pneumatic BITE Procedure (4) AMM 71-11-04/201, Fan Cowl Panels (5) AMM 71-11-06/201, Core Cowl Panels (6) AMM 78-31-00/201, Fan Thrust Reverser System <p>B. Access</p> <ul style="list-style-type: none"> (1) Location Zones <ul style="list-style-type: none"> 410 Left Power Plant Nacelle 430 No. 1 Nacelle Strut <p>C. Prepare for the Test</p>	

3 9 4 6	EFFECTIVITY	FUNCTIONAL	AIR SUPPLY THERMAL OVERTEMP SWITCH
		36-22-00-5A	36-009-01-1 PAGE 1 OF 6 AUG 22/01

SAS



767

TASK CARD

BOEING CARD NO. 36-009-01-1
AIRLINE CARD NO.

MECH	INSP
------	------

- (1) Make sure that these circuit breakers on the P11 panel are closed:
 - (a) 11J2, EICAS CMPTR L
 - (b) 11J3, EICAS UPPER DSPL
 - (c) 11J29, EICAS CMPTR R
 - (d) 11J30, EICAS LOWER DSPL
 - (e) 11J31, EICAS DSPL SW
 - (f) 11J32, EICAS DSPL SELECT
 - (g) 11S10, LEFT ENG BLEED IND
 - (h) 11S11, LEFT ENG BLEED CONT
 - (i) 11S19, RIGHT ENG BLEED IND
 - (j) 11S20, RIGHT ENG BLEED CONT
- (2) Make sure that this circuit breaker on the P36 panel is closed:
 - (a) 36L7 OR 36K7, AIR SUPPLY BITE
- (3) Supply the electrical power (AMM 24-22-00/201).
- (4) AIRPLANES WITH PW 4000 ENGINES;
Do these steps to get access to the high pressure shutoff valve (HPSOV), high pressure controller (HPC), and the air supply overheat switch:

WARNING: DO THE DEACTIVATION PROCEDURE TO PREVENT THE OPERATION OF THE THRUST REVERSER. THE ACCIDENTAL OPERATION OF THE THRUST REVERSER CAN CAUSE INJURIES TO PERSONS AND DAMAGE TO EQUIPMENT.

- (a) Do the deactivation procedure for the thrust reverser for ground maintenance (AMM 78-31-00/201).
- (b) Open the left fan cowl panel, 413AL (AMM 71-11-04/201).
- (c) Open the left core cowl panel, 417AL (AMM 71-11-06/201).

3
9
4
7

EFFECTIVITY



FUNCTIONAL	AIR SUPPLY THERMAL OVERTEMP SWITCH
36-22-00-5A	36-009-01-1 PAGE 2 OF 6 DEC 22/06

SAS



767

TASK CARD

BOEING CARD NO. 36-009-01-1
AIRLINE CARD NO.

MECH	INSP

WARNING: OBEY THE INSTRUCTIONS IN THE PROCEDURE TO OPEN THE THRUST REVERSERS. IF YOU DO NOT OBEY THE INSTUCTIONS, INJURIES TO PERSONS AND DAMAGE TO EQUIPMENT CAN OCCUR.

(d) Open the left thrust reverser, 415AL (AMM 78-31-00/201).

(e) Find the high pressure shutoff valve (HPSOV) and the high pressure controller (HPC).

WARNING: DO THE DEACTIVATION PROCEDURE FOR THE LEADING EDGE SLATS. THE ACCIDENTAL MOVEMENT OF THE SLATS CAN CAUSE INJURY TO PERSONS AND DAMAGE TO EQUIPMENT.

(f) Do the deactivation procedure for the leading edge slats (AMM 27-81-00/201).

(g) Open the strut pressure relief door, 434AL.

(h) Find the air supply overheat switch.

(5) Make sure that the left ENG switch on the P5 panel is in the OFF position (white flow bar is not shown).

D. Do the Test for the Overheat Switch Circuit (Fig. 501)

(1) Disconnect the wire from the terminal 2 of the HPSOV.

(2) Make sure that the wire is fully insulated from the ground.

(3) Make sure that the BLEED light on the P5 panel comes on in 8 ±3 seconds.

(4) Make sure the EICAS message, L ENG HPSOV, shows on the top EICAS screen.

(5) Push the L ENG switch-light on the P5 panel to the on position (white flow bar is on).

(6) Make sure that the BLEED light for the left engine on the P5 panel goes off.

(7) Make sure that the EICAS message, L ENG HPSOV, does not show on the top EICAS display.

3
9
4
8

EFFECTIVITY

--

FUNCTIONAL
36-22-00-5A

AIR SUPPLY THERMAL OVERTEMP SWITCH
36-009-01-1 PAGE 3 OF 6 DEC 22/06

MECH	INSP

- (8) Remove the electrical connector from the left high pressure controller (HP Controller).
- (9) Make sure that the BLEED light for the left engine on the P5 panel comes on.
- (10) Make sure that the EICAS message, L ENG HPSOV, shows on the top EICAS display.
- (11) Disconnect the electrical connector from the air supply overheat switch.
- (12) Put a jumper between pins 1 and 2 of the connector.
- (13) Make sure the OVHT light on the P5 panel comes on in 6 seconds.
- (14) Make sure that the EICAS message, L ENG BLD OVHT, shows on the top EICAS display.
- (15) Remove the jumpers from the pins 1 and 2 attached to the connector.
- (16) Reconnect the electrical connector to the overheat switch.
- (17) Make sure the OVHT and BLEED lights stay on.
- (18) Make sure the EICAS messages, L ENG BLD OVHT, and L ENG HPSOV, stay shown.
- (19) Connect the wire to the terminal 2 of the HPSOV.
- (20) Connect the electrical connector to the left engine HP Controller.
- (21) Make sure the BLEED light on the P5 panel goes off.
- (22) Make sure the EICAS message, L ENG HPSOV, does not show on the top of the EICAS display.
- (23) Push the L ENG switch on the P5 panel to the OFF position.
 - (a) Make sure that the white flow bar goes out.
- (24) Push the L ENG switch on the P5 panel to the ON position.
 - (a) Make sure that the white flow bar comes on.
- (25) Make sure the OVHT light on the P5 panel goes off.

3
9
4
9

EFFECTIVITY

--

FUNCTIONAL
36-22-00-5A

AIR SUPPLY THERMAL OVERTEMP SWITCH
36-009-01-1 PAGE 4 OF 6 DEC 22/06

SAS



767

TASK CARD

BOEING CARD NO. 36-009-01-1
AIRLINE CARD NO.

MECH	INSP
------	------

(26) Make sure that the EICAS message, L ENG BLD OVHT, does not show on the top of the EICAS display.

E. Put the Airplane Back to Its Usual Condition

(1) AIRPLANES WITH PW 4000 ENGINES;
Do the steps that follow:

(a) Close the strut pressure relief door, 434AL.

WARNING: OBEY THE INSTRUCTIONS IN THE PROCEDURE TO CLOSE THE THRUST REVERSERS. IF YOU DO NOT OBEY THE INSTRUCTIONS, INJURIES TO PERSONS AND DAMAGE TO EQUIPMENT CAN OCCUR.

(b) Close the left thrust reverser, 415AL (AMM 78-31-00/201).

(c) Close the left core cowl panel, 417AL (AMM 71-11-06/201).

(d) Close the left fan cowl panel, 413AL (AMM 71-11-04/201).

(e) Do the activation procedure for the thrust reverser (AMM 78-31-00/201).

(f) Do the activation procedure for the leading edge slats (AMM 27-81-00/201).

(2) Do the pneumatic BITE procedure (AMM 36-23-00/501).

3
9
5
0

EFFECTIVITY



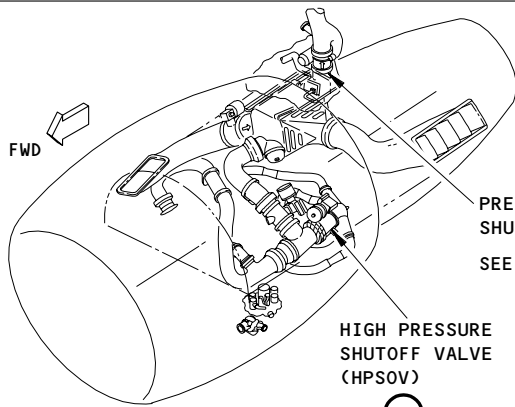
FUNCTIONAL

36-22-00-5A

AIR SUPPLY THERMAL OVERTEMP SWITCH

36-009-01-1 PAGE 5 OF 6 AUG 22/01

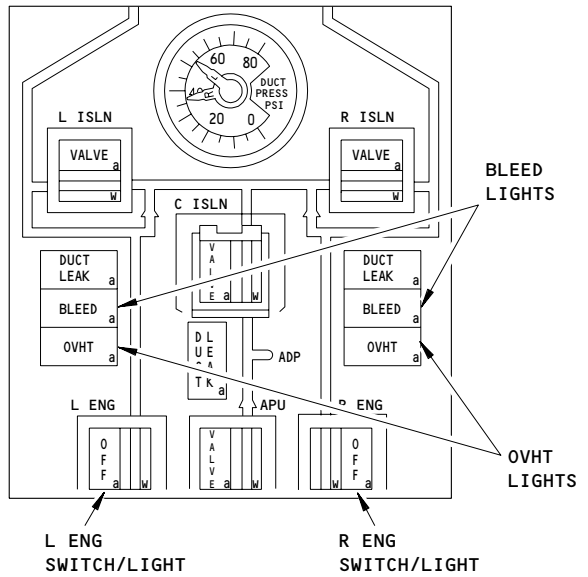
SAS  **BOEING**
 767
TASK CARD



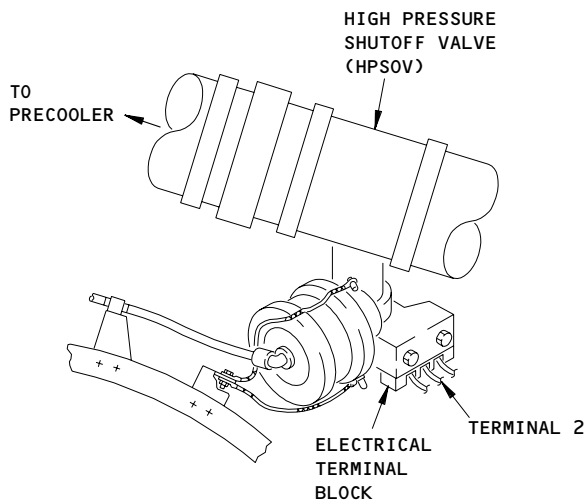
PW 4000

PRESSURE REGULATING AND SHUTOFF VALVE (PRSOV)
 SEE (B)

HIGH PRESSURE SHUTOFF VALVE (HPSOV)
 SEE (A)

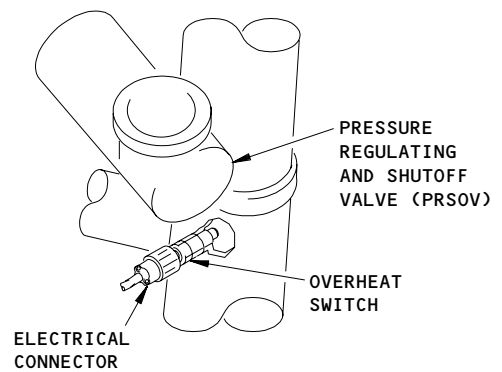


BLEED AIR SUPPLY PANEL (P5)



HIGH PRESSURE SHUTOFF VALVE (HPSOV)

(A)



PRESSURE REGULATING AND SHUTOFF VALVE (PRSOV)

(B)

**Temperature Indicating System Adjustment Test
 Figure 501**

3 9 5 1 c52276	EFFECTIVITY	FUNCTIONAL	AIR SUPPLY THERMAL OVERTEMP SWITCH
		36-22-00-5A	36-009-01-1 PAGE 6 OF 6 APR 22/07

STATION
TAIL NO.
DATE



BOEING CARD NO. 36-009-01-2
AIRLINE CARD NO.

SKILL ENGIN	WORK AREA STRUT 2	RELATED TASK	INTERVAL 4C	PHASE 14848	MPD REV 013	TASK CARD REVISION APR 22/07
TASK FUNCTIONAL		TITLE AIR SUPPLY THERMAL OVERTEMP SWITCH		STRUCTURAL ILLUSTRATION REFERENCE		APPLICABILITY AIRPLANE ENGINE NOTE ALL
ZONES 444			ACCESS PANELS 425AL 426AR 444AL			

MECH	INSP	MPD ITEM NUMBER 36-22-00-5B			
		<p>FUNCTIONALLY CHECK (OFF-AIRCRAFT) THE SETTING OF THE AIR SUPPLY THERMAL OVERTEMP SWITCH (RIGHT ENGINE).</p> <p>AIRPLANE NOTE: TASK APPLICABLE TO ALL AIRPLANE MODELS EXCEPT THE 767-400ER.</p> <p>THE FOLLOWING PROCEDURE APPLIES TO THE ON-AIRCRAFT PORTION OF THIS TASK (CIRCUIT VERIFICATION). OFF-AIRCRAFT AIR SUPPLY THERMAL OVER-TEMPERATURE SWITCH PROCEDURES ARE FOUND IN THE SUPPLIER COMPONENT MAINTENANCE MANUAL DOCUMENT.</p> <p>1. <u>Operational Test - Right Engine Air Supply Temperature Indicating System</u></p> <p>A. References</p> <ul style="list-style-type: none"> (1) AMM 24-22-00/201, Electrical Power Control (2) AMM 27-81-00/201, Leading Edge Slat System (3) AMM 36-23-00/501, Pneumatic BITE Procedure (4) AMM 71-11-04/201, Fan Cowl Panels (5) AMM 71-11-06/201, Core Cowl Panels (6) AMM 78-31-00/201, Fan Thrust Reverser System <p>B. Access</p> <ul style="list-style-type: none"> (1) Location Zones <ul style="list-style-type: none"> 420 Right Power Plant Nacelle 440 No. 2 Nacelle Strut 			

EFFECTIVITY	FUNCTIONAL	AIR SUPPLY THERMAL OVERTEMP SWITCH
	36-22-00-5B	36-009-01-2 PAGE 1 OF 6 APR 22/01

3
9
5
2

SAS



767

TASK CARD

BOEING CARD NO. 36-009-01-2
AIRLINE CARD NO.

MECH	INSP

(2) Access Panels

- 423AL Fan Cowl Panel
- 425AL Thrust Reverser
- 427AL Core Cowl Panel
- 444AL Strut Pressure Relief Door and Pneumatic System Valve

C. Prepare for the Test

(1) Make sure that these circuit breakers on the P11 panel are closed:

- (a) 11J2, EICAS CMPTR L
- (b) 11J3, EICAS UPPER DSPL
- (c) 11J29, EICAS CMPTR R
- (d) 11J30, EICAS LOWER DSPL
- (e) 11J31, EICAS DSPL SW
- (f) 11J32, EICAS DSPL SELECT
- (g) 11S10, LEFT ENG BLEED IND
- (h) 11S11, LEFT ENG BLEED CONT
- (i) 11S19, RIGHT ENG BLEED IND
- (j) 11S20, RIGHT ENG BLEED CONT

(2) Make sure that this circuit breaker on the P36 panel is closed:

- (a) 36L7 OR 36K7, AIR SUPPLY BITE

(3) Supply the electrical power (AMM 24-22-00/201).

(4) AIRPLANES WITH PW 4000 ENGINES;
Do these steps to get access to the high pressure shutoff valve (HPSOV), high pressure controller (HPC), and the air supply overheat switch:

3
9
5
3

EFFECTIVITY

--

FUNCTIONAL
36-22-00-5B

AIR SUPPLY THERMAL OVERTEMP SWITCH
36-009-01-2 PAGE 2 OF 6 DEC 22/06

MECH	INSP
------	------

WARNING: DO THE DEACTIVATION PROCEDURE TO PREVENT THE OPERATION OF THE THRUST REVERSER. THE ACCIDENTAL OPERATION OF THE THRUST REVERSER CAN CAUSE INJURIES TO PERSONS AND DAMAGE TO EQUIPMENT.

- (a) Do the deactivation procedure for the thrust reverser for ground maintenance (AMM 78-31-00/201).
- (b) Open the left fan cowl panel, 423AL (AMM 71-11-04/201).
- (c) Open the left core cowl panel, 427AL (AMM 71-11-06/201).

WARNING: OBEY THE INSTRUCTIONS IN THE PROCEDURE TO OPEN THE THRUST REVERSERS. IF YOU DO NOT OBEY THE INSTUCTIONS, INJURIES TO PERSONS AND DAMAGE TO EQUIPMENT CAN OCCUR.

- (d) Open the left thrust reverser, 425AL (AMM 78-31-00/201).
- (e) Find the high pressure shutoff valve (HPSOV) and the high pressure controller (HPC).

WARNING: DO THE DEACTIVATION PROCEDURE FOR THE LEADING EDGE SLATS. THE ACCIDENTAL MOVEMENT OF THE SLATS CAN CAUSE INJURY TO PERSONS AND DAMAGE TO EQUIPMENT.

- (f) Do the deactivation procedure for the leading edge slats (AMM 27-81-00/201).
- (g) Open the strut pressure relief door, 444AL.
- (h) Find the air supply overheat switch.
- (5) Make sure the right ENG switch on the P5 panel is in the OFF position (white flow bar is not shown).

D. Do the Test for the Overheat Switch Circuit (Fig. 501)

- (1) Disconnect the wire from the terminal 2 of the HPSOV.
- (2) Make sure that the wire is fully insulated from the ground.

3
9
5
4

EFFECTIVITY

	FUNCTIONAL	AIR SUPPLY THERMAL OVERTEMP SWITCH
	36-22-00-5B	36-009-01-2 PAGE 3 OF 6 DEC 22/06

SAS



767

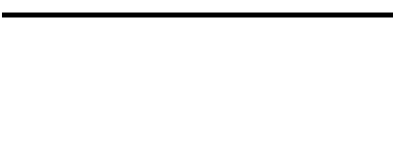
TASK CARD

BOEING CARD NO. 36-009-01-2
AIRLINE CARD NO.

MECH	INSP
------	------

- (3) Make sure the BLEED light on the P5 panel comes on in 8 ± 3 seconds.
- (4) Make sure the EICAS message, R ENG HPSOV, shows on the top EICAS display.
- (5) Push the R ENG switch-light on the P5 panel to the on position (white flowbar comes on).
- (6) Make sure that the BLEED light on the right engine on the P5 panel goes off.
- (7) Make sure that the EICAS message, R ENG HPSOV, does not show on the top EICAS display.
- (8) Remove the electrical connector from the HP Controller in the right engine.
- (9) Make sure that the BLEED light on the right engine on the P5 panel comes on.
- (10) Make sure that the EICAS message, R ENG HPSOV, does show on the top EICAS display.
- (11) Disconnect the electrical connector from the overheat switch.
- (12) Put a jumper between pins 1 and 2 of the connector.
- (13) Make sure the OVHT light on the P5 panel comes on in 6 seconds.
- (14) Make sure the EICAS message, R ENG BLD OVHT, does show on the top EICAS display.
- (15) Remove the jumpers from the pins 1 and 2 which is attached to the connector.
- (16) Reconnect the electrical connector to the overheat switch.
- (17) Make sure the OVHT and BLEED lights stay on.
- (18) Make sure the EICAS messages, R ENG BLD OVHT, R ENG HPSOV, stay shown.
- (19) Connect the wire to the terminal 2 of the HPSOV.
- (20) Connect the electrical connector to the right engine HP Controller.
- (21) Make sure the BLEED light on the P5 panel goes off.

EFFECTIVITY



FUNCTIONAL

AIR SUPPLY THERMAL OVERTEMP SWITCH

36-22-00-5B

36-009-01-2 PAGE 4 OF 6 DEC 22/06

3
9
5
5

MECH	INSP

- (22) Make sure the EICAS message, R ENG HPSOV, does not show on the top EICAS display.
- (23) Push the R ENG switch on the P5 panel to the OFF position.
- (24) Make sure that the white flow bar goes out.
- (25) Push the R ENG switch on the P5 panel to the ON position.
- (26) Make sure that the white flow bar comes on.
- (27) Make sure the OVHT light on the P5 panel goes off.
- (28) Make sure the EICAS message, R ENG BLD OVHT, does not show on the top of the EICAS display.

E. Put the Airplane Back to Its Usual Condition

- (1) AIRPLANES WITH PW 4000 ENGINES;
Do the steps that follow:

- (a) Close the strut pressure relief door, 444AL.

WARNING: OBEY THE INSTRUCTIONS IN THE PROCEDURE TO CLOSE THE THRUST REVERSERS. IF YOU DO NOT OBEY THE INSTRUCTIONS, INJURIES TO PERSONS AND DAMAGE TO EQUIPMENT CAN OCCUR.

- (b) Close the left thrust reverser, 425AL (AMM 78-31-00/201).
 - (c) Close the left core cowl panel, 427AL (AMM 71-11-06/201).
 - (d) Close the left fan cowl panel, 423AL (AMM 71-11-04/201).
 - (e) Do the activation procedure for the thrust reverser (AMM 78-31-00/201).
 - (f) Do the activation procedure for the leading edge slats (AMM 27-81-00/201).

- (2) Do the pneumatic BITE procedure (AMM 36-23-00/501).

3
9
5
6

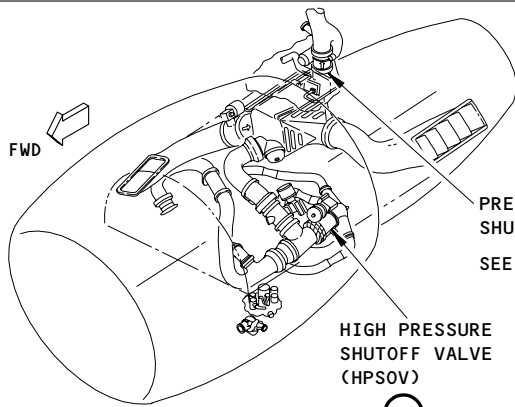
EFFECTIVITY

--

FUNCTIONAL
36-22-00-5B

AIR SUPPLY THERMAL OVERTEMP SWITCH
36-009-01-2 PAGE 5 OF 6 DEC 22/00

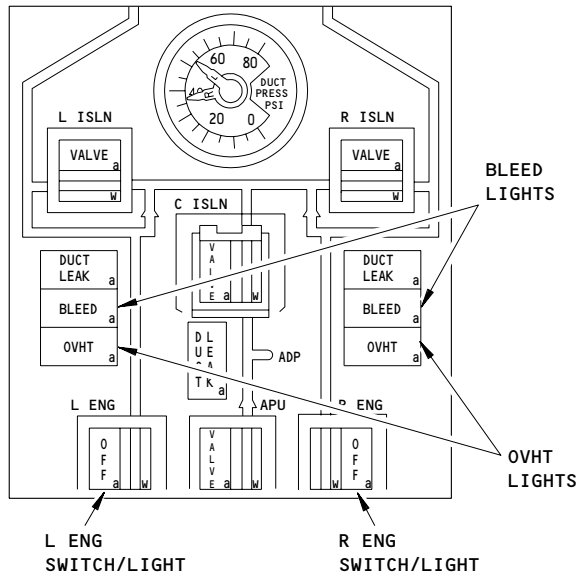
SAS  **BOEING**
 767
 TASK CARD



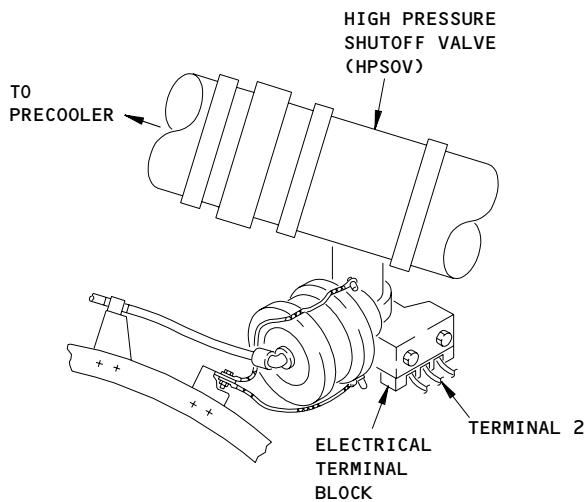
PW 4000

PRESSURE REGULATING AND SHUTOFF VALVE (PRSOV)
 SEE (B)

HIGH PRESSURE SHUTOFF VALVE (HPSOV)
 SEE (A)

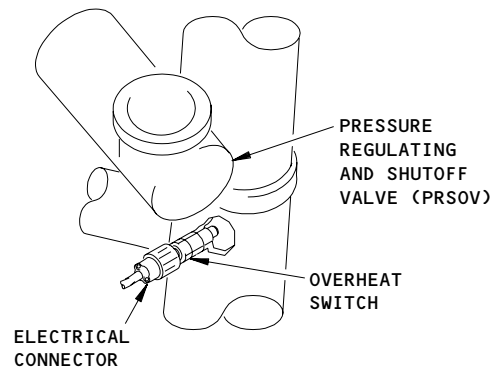


BLEED AIR SUPPLY PANEL (P5)



HIGH PRESSURE SHUTOFF VALVE (HPSOV)

(A)



PRESSURE REGULATING AND SHUTOFF VALVE (PRSOV)

(B)

Temperature Indicating System Adjustment Test
 Figure 501

3
9
5
7

EFFECTIVITY

C52276

FUNCTIONAL

36-22-00-5B

AIR SUPPLY THERMAL OVERTEMP SWITCH

36-009-01-2 PAGE 6 OF 6 APR 22/07

STATION
TAIL NO.
DATE



BOEING CARD NO. 36-009-10-1
AIRLINE CARD NO.

SKILL ENGIN	WORK AREA STRUT 1	RELATED TASK	INTERVAL 4C	PHASE 14848	MPD REV	TASK CARD REVISION DEC 22/06
TASK FUNCTIONAL	TITLE AIR SUPPLY THERMAL OVERTEMP SWITCH		STRUCTURAL ILLUSTRATION REFERENCE		APPLICABILITY AIRPLANE ENGINE NOTE ALL	
ZONES 434		ACCESS PANELS 415AL 416AR 434AL				

MECH	INSP	MPD ITEM NUMBER 36-22-01-4A
<p>FUNCTIONALLY CHECK (OFF-AIRCRAFT) THE SETTING OF THE AIR SUPPLY THERMAL OVERTEMP SWITCH (LEFT ENGINE).</p> <p>AIRPLANE NOTE: TASK APPLICABLE TO ALL AIRPLANE MODELS EXCEPT THE 767-400ER.</p> <p>THE FOLLOWING PROCEDURE APPLIES TO THE ON-AIRCRAFT PORTION OF THIS TASK (REMOVE AND INSTALL). OFF-AIRCRAFT AIR SUPPLY THERMAL OVER-TEMPERATURE SWITCH PROCEDURES ARE FOUND IN THE SUPPLIER COMPONENT MAINTENANCE MANUAL DOCUMENT.</p> <p>THIS TASK IS ASSOCIATED WITH MPD ITEM NO.36-22-00-5A.</p> <p style="text-align: center;"><u>AIR SUPPLY OVERHEAT SWITCH - REMOVAL/INSTALLATION</u></p> <p>1. <u>General</u></p> <p>A. The air supply overheat switch (which is referred to as the overheat switch in this procedure) is upstream of the PRSOV. When the switch becomes too hot, it sends signals to the control card for the air supply system.</p> <p>2. <u>Remove the Air Supply Overheat Switch</u></p> <p>A. References</p> <p>(1) AMM 27-81-00/201, Leading Edge Slat System</p> <p>(2) AMM 78-31-00/201, Fan Thrust Reverser System</p> <p>B. Access</p> <p>(1) Location Zones</p> <p style="padding-left: 40px;">430 No.1 Nacelle Strut</p> <p style="padding-left: 40px;">440 No.2 Nacelle Strut</p>		

3 9 5 8	EFFECTIVITY	FUNCTIONAL	AIR SUPPLY THERMAL OVERTEMP SWITCH
		36-22-01-4A	36-009-10-1 PAGE 1 OF 5 DEC 22/06

MECH	INSP

(2) Access Panels
434AL/444AL Strut Pressure Relief Door and Pneumatic System Valve

C. Prepare for the Removal of the Air Supply Overheat Switch (Fig. 401)

(1) To remove the right switch, open these circuit breakers on the P11 panel, and attach the DO-NOT-CLOSE tag:

- (a) 11S19, R ENG BLEED IND
- (b) 11S20, R ENG BLEED CONT

(2) To remove the left switch, open these circuit breakers on the P11 panel, and attach the DO-NOT-CLOSE tag:

- (a) 11S10, L ENG BLEED IND
- (b) 11S11, L ENG BLEED CONT

WARNING: DO THE DEACTIVATION PROCEDURE TO PREVENT THE OPERATION OF THE THRUST REVERSER. THE ACCIDENTAL OPERATION OF THE THRUST REVERSER CAN CAUSE INJURIES TO PERSONS AND DAMAGE TO EQUIPMENT.

(3) Do the deactivation procedure for the thrust reversers for ground maintenance (AMM 78-31-00/201).

WARNING: DO THE DEACTIVATION PROCEDURE FOR THE LEADING EDGE SLATS. THE ACCIDENTAL MOVEMENT OF THE SLATS CAN CAUSE INJURY TO PERSONS AND DAMAGE TO EQUIPMENT.

(4) Do the deactivation procedure for the leading edge slats (AMM 27-81-00/201).

(5) Open the strut pressure relief door, 434AL(444AL).

D. Remove the Air Supply Overheat Switch

- (1) Remove the electrical connector from the switch.
- (2) Loosen the switch from the boss.

3
9
5
9

EFFECTIVITY	FUNCTIONAL	AIR SUPPLY THERMAL OVERTEMP SWITCH
	36-22-01-4A	36-009-10-1 PAGE 2 OF 5 DEC 22/06

SAS



767

TASK CARD

BOEING CARD NO. 36-009-10-1
AIRLINE CARD NO.

MECH	INSP

(3) Remove the switch.

(a) Discard the O-ring.

3. Install the Air Supply Overheat Switch (Fig. 401)

A. References

(1) AMM 27-81-00/201, Leading Edge Slat System

(2) 78-31-00/201, Fan Thrust Reverser System

B. Access

(1) Location Zones

430 No.1 Nacelle Strut

440 No.2 Nacelle Strut

(2) Access Panels

434AL/444AL Strut Pressure Relief Door and Pneumatic System Valve

C. Overheat Switch Installation

(1) Install a new O-ring on the overheat switch.

(2) Install and tighten the overheat switch in the boss.

(3) Install the electrical connector on the switch.

D. Put the Airplane Back To It's Usual Condition

(1) Close the strut pressure relief door, 434AL(444AL).

(2) Do the activation procedure for leading edge slats (AMM 27-81-00/201).

(3) Do the activation procedure for the thrust reversers (AMM 78-31-00/201).

(4) If you installed the right switch, remove the DO-NOT-CLOSE tags and close these circuit breakers on the P11 panel:

(a) 11S19, R ENG BLEED IND

3
9
6
0

EFFECTIVITY

FUNCTIONAL

36-22-01-4A

AIR SUPPLY THERMAL OVERTEMP SWITCH

36-009-10-1 PAGE 3 OF 5 DEC 22/06

SAS



767

TASK CARD

BOEING CARD NO. 36-009-10-1
AIRLINE CARD NO.

MECH	INSP

- (b) 11S20, R ENG BLEED CONT
- (5) If you installed the left switch, remove the DO-NOT-CLOSE tags and close these circuit breakers on the P11 panel:
 - (a) 11S10, L ENG BLEED IND
 - (b) 11S11, L ENG BLEED CONT

3
9
6
1

EFFECTIVITY



FUNCTIONAL

36-22-01-4A

AIR SUPPLY THERMAL OVERTEMP SWITCH

36-009-10-1 PAGE 4 OF 5 AUG 22/01

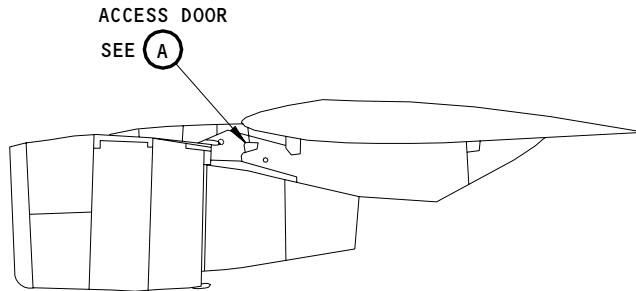
SAS



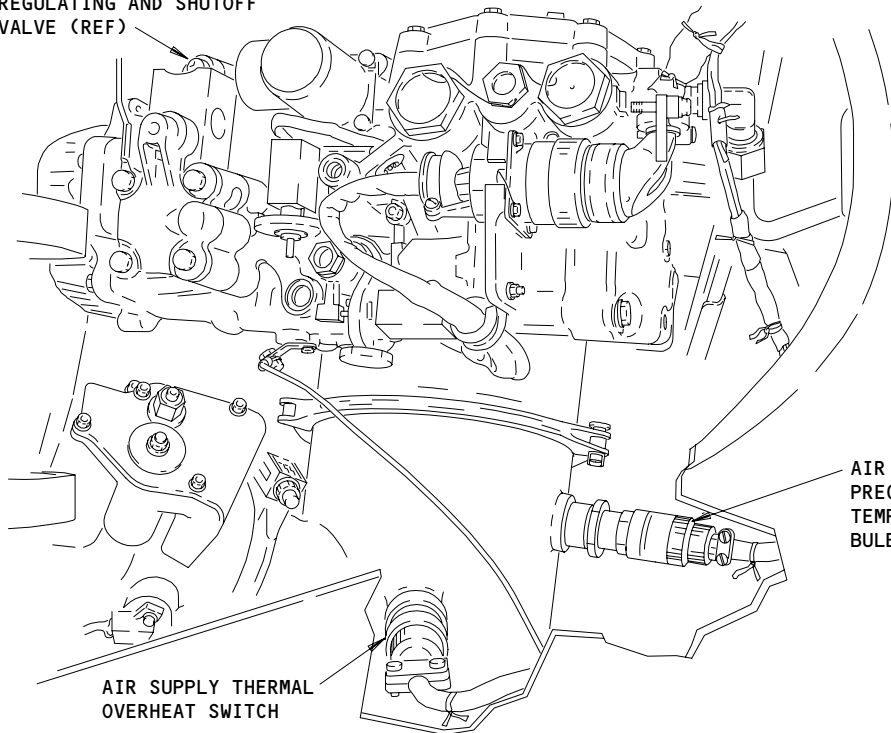
767

TASK CARD

BOEING CARD NO. 36-009-10-1
AIRLINE CARD NO.



AIR SUPPLY PRESSURE
REGULATING AND SHUTOFF
VALVE (REF)



ACCESS DOOR TO LEFT SIDE OF STRUT

1 IF INSTALLED

(A)

Air Supply Thermal Overtemperature Switch Installation
Figure 401

3
9
6
2

EFFECTIVITY

F53155

FUNCTIONAL

36-22-01-4A

AIR SUPPLY THERMAL OVERTEMP SWITCH

36-009-10-1 PAGE 5 OF 5 AUG 22/01

STATION
TAIL NO.
DATE



BOEING CARD NO. 36-009-10-2
AIRLINE CARD NO.

SKILL ENGIN	WORK AREA STRUT 2	RELATED TASK	INTERVAL 4C	PHASE 14848	MPD REV	TASK CARD REVISION DEC 22/06
TASK FUNCTIONAL	TITLE AIR SUPPLY THERMAL OVERTEMP SWITCH	STRUCTURAL ILLUSTRATION REFERENCE		APPLICABILITY AIRPLANE ENGINE NOTE ALL		
ZONES 434		ACCESS PANELS 415AL 416AR 434AL				

MECH	INSP	MPD ITEM NUMBER 36-22-01-4A
<p>FUNCTIONALLY CHECK (OFF-AIRCRAFT) THE SETTING OF THE AIR SUPPLY THERMAL OVERTEMP SWITCH (RIGHT ENGINE).</p> <p>AIRPLANE NOTE: TASK APPLICABLE TO ALL AIRPLANE MODELS EXCEPT THE 767-400ER.</p> <p>THE FOLLOWING PROCEDURE APPLIES TO THE ON-AIRCRAFT PORTION OF THIS TASK (REMOVE AND INSTALL). OFF-AIRCRAFT AIR SUPPLY THERMAL OVER-TEMPERATURE SWITCH PROCEDURES ARE FOUND IN THE SUPPLIER COMPONENT MAINTENANCE MANUAL DOCUMENT.</p> <p>THIS TASK CARD IS ASSOCIATED WITH MPD ITEM 36-22-00-5B.</p> <p style="text-align: center;"><u>AIR SUPPLY OVERHEAT SWITCH - REMOVAL/INSTALLATION</u></p> <p>1. <u>General</u></p> <p>A. The air supply overheat switch (which is referred to as the overheat switch in this procedure) is upstream of the PRSOV. When the switch becomes too hot, it sends signals to the control card for the air supply system.</p> <p>2. <u>Remove the Air Supply Overheat Switch</u></p> <p>A. References</p> <p>(1) AMM 27-81-00/201, Leading Edge Slat System</p> <p>(2) AMM 78-31-00/201, Fan Thrust Reverser System</p> <p>B. Access</p> <p>(1) Location Zones</p> <p style="padding-left: 40px;">430 No.1 Nacelle Strut</p> <p style="padding-left: 40px;">440 No.2 Nacelle Strut</p>		

3 9 6 3	EFFECTIVITY	FUNCTIONAL	AIR SUPPLY THERMAL OVERTEMP SWITCH
		36-22-01-4A	36-009-10-2 PAGE 1 OF 5 DEC 22/06

MECH	INSP
------	------

(2) Access Panels
434AL/444AL Strut Pressure Relief Door and Pneumatic System Valve

C. Prepare for the Removal of the Air Supply Overheat Switch (Fig. 401)

(1) To remove the right switch, open these circuit breakers on the P11 panel, and attach the DO-NOT-CLOSE tag:

- (a) 11S19, R ENG BLEED IND
- (b) 11S20, R ENG BLEED CONT

(2) To remove the left switch, open these circuit breakers on the P11 panel, and attach the DO-NOT-CLOSE tag:

- (a) 11S10, L ENG BLEED IND
- (b) 11S11, L ENG BLEED CONT

WARNING: DO THE DEACTIVATION PROCEDURE TO PREVENT THE OPERATION OF THE THRUST REVERSER. THE ACCIDENTAL OPERATION OF THE THRUST REVERSER CAN CAUSE INJURIES TO PERSONS AND DAMAGE TO EQUIPMENT.

(3) Do the deactivation procedure for the thrust reversers for ground maintenance (AMM 78-31-00/201).

WARNING: DO THE DEACTIVATION PROCEDURE FOR THE LEADING EDGE SLATS. THE ACCIDENTAL MOVEMENT OF THE SLATS CAN CAUSE INJURY TO PERSONS AND DAMAGE TO EQUIPMENT.

(4) Do the deactivation procedure for the leading edge slats (AMM 27-81-00/201).

(5) Open the strut pressure relief door, 434AL(444AL).

D. Remove the Air Supply Overheat Switch

- (1) Remove the electrical connector from the switch.
- (2) Loosen the switch from the boss.

3 9 6 4	EFFECTIVITY	FUNCTIONAL	AIR SUPPLY THERMAL OVERTEMP SWITCH
		36-22-01-4A	36-009-10-2 PAGE 2 OF 5 DEC 22/06

MECH	INSP
------	------

- (3) Remove the switch.
 - (a) Discard the O-ring.

3. Install the Air Supply Overheat Switch (Fig. 401)

A. References

- (1) AMM 27-81-00/201, Leading Edge Slat System
- (2) 78-31-00/201, Fan Thrust Reverser System

B. Access

- (1) Location Zones
 - 430 No.1 Nacelle Strut
 - 440 No.2 Nacelle Strut
- (2) Access Panels
 - 434AL/444AL Strut Pressure Relief Door and Pneumatic System Valve

C. Overheat Switch Installation

- (1) Install a new O-ring on the overheat switch.
- (2) Install and tighten the overheat switch in the boss.
- (3) Install the electrical connector on the switch.

D. Put the Airplane Back To It's Usual Condition

- (1) Close the strut pressure relief door, 434AL(444AL).
- (2) Do the activation procedure for leading edge slats (AMM 27-81-00/201).
- (3) Do the activation procedure for the thrust reversers (AMM 78-31-00/201).
- (4) If you installed the right switch, remove the DO-NOT-CLOSE tags and close these circuit breakers on the P11 panel:
 - (a) 11S19, R ENG BLEED IND

3
9
6
5

EFFECTIVITY



FUNCTIONAL

36-22-01-4A

AIR SUPPLY THERMAL OVERTEMP SWITCH

36-009-10-2 PAGE 3 OF 5 DEC 22/06

SAS



767

TASK CARD

BOEING CARD NO. 36-009-10-2
AIRLINE CARD NO.

MECH	INSP

- (b) 11S20, R ENG BLEED CONT
- (5) If you installed the left switch, remove the DO-NOT-CLOSE tags and close these circuit breakers on the P11 panel:
 - (a) 11S10, L ENG BLEED IND
 - (b) 11S11, L ENG BLEED CONT

3
9
6
6

EFFECTIVITY



FUNCTIONAL	AIR SUPPLY THERMAL OVERTEMP SWITCH
36-22-01-4A	36-009-10-2 PAGE 4 OF 5 AUG 22/01

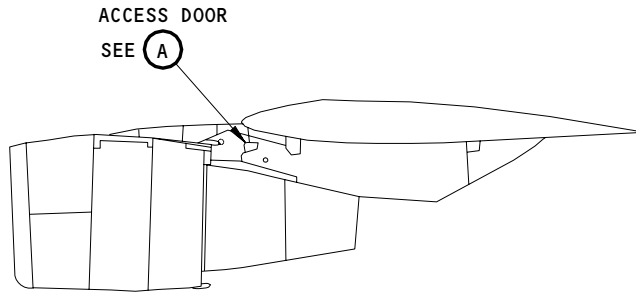
SAS



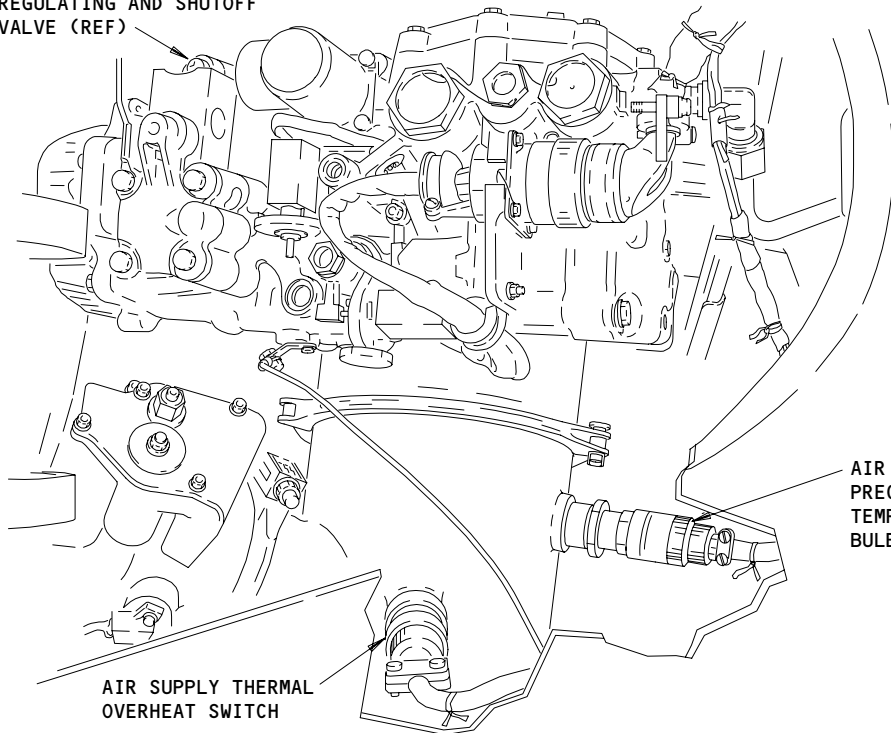
767

TASK CARD

BOEING CARD NO. 36-009-10-2
AIRLINE CARD NO.



AIR SUPPLY PRESSURE
REGULATING AND SHUTOFF
VALVE (REF)



AIR SUPPLY
PRECOOLER OUT
TEMPERATURE
BULB 1

AIR SUPPLY THERMAL
OVERHEAT SWITCH

ACCESS DOOR TO LEFT SIDE OF STRUT

1 IF INSTALLED

(A)

Air Supply Thermal Overtemperature Switch Installation
Figure 401

3
9
6
7

EFFECTIVITY

F53155

--

FUNCTIONAL
36-22-01-4A

AIR SUPPLY THERMAL OVERTEMP SWITCH
36-009-10-2 PAGE 5 OF 5 AUG 22/01

STATION
TAIL NO.
DATE



BOEING CARD NO. 36-011-51-1
AIRLINE CARD NO.

SKILL ENGIN	WORK AREA ENGINE 1	RELATED TASK	INTERVAL 1C	PHASE 11212	MPD REV 012	TASK CARD REVISION APR 22/07
TASK REPLACE		TITLE ENGINE 1 HP CONTROLLER AIR FILTER		STRUCTURAL ILLUSTRATION REFERENCE		APPLICABILITY AIRPLANE ENGINE ALL NOTE
ZONES 411			ACCESS PANELS 415AL 417AL			

MECH	INSP	MPD ITEM NUMBER 36-11-08-4B
<p>REPLACE THE ENGINE 1 HIGH PRESSURE CONTROLLER AIR FILTER ELEMENT WITH A SERVICEABLE FILTER ELEMENT.</p> <p>ENGINE NOTE: THIS TASK IS APPLICABLE TO THE 4000, 7R4, 80A AND 80C ENGINES.</p> <p>1. <u>Remove the Air Filter on the High Pressure Controller</u> (Fig. 402)</p> <p>A. References</p> <ul style="list-style-type: none"> (1) AMM 24-22-00/201, Electrical Power Control (2) AMM 36-00-00/201, Pneumatic - General (3) AMM 36-11-19/401, Pressure Regulating Valve Controller (4) AMM 36-23-00/501, Air Supply BITE System (5) AMM 71-11-06/201, Core Cowl Panels (6) AMM 78-31-00/201, Thrust Reverser System <p>B. Prepare for the Removal</p> <p>WARNING: DO THE DEACTIVATION PROCEDURE FOR THE THRUST REVERSER ISOLATION VALVE TO PREVENT THE OPERATION OF THE THRUST REVERSER. THE ACCIDENTAL OPERATION OF THE THRUST REVERSER CAN CAUSE INJURY TO PERSONS OR DAMAGE TO EQUIPMENT.</p> <ul style="list-style-type: none"> (1) Do this procedure: Thrust Reverser Isolation Valve Deactivation for Ground Maintenance (AMM 78-31-00/201). (2) Open the left fan cowl panel, 413AL/423AL (AMM 71-11-04/201). 		

3 9 6 8	EFFECTIVITY	REPLACE	ENGINE 1 HP CONTROLLER AIR FILTER
		36-11-08-4B	36-011-51-1 PAGE 1 OF 5 APR 22/07

MECH	INSP
------	------

(3) Open the left core cowl panel, 417AL/427AL (AMM 71-11-06/201).

WARNING: OBEY THE INSTRUCTIONS IN THE PROCEDURE TO OPEN THE THRUST REVERSERS. IF YOU DO NOT OBEY THE INSTRUCTIONS, INJURIES TO PERSONS AND DAMAGE TO EQUIPMENT CAN OCCUR.

(4) Open the left thrust reverser, 415AL/425AL (AMM 78-31-00/201).

C. HPC WITH FILTER AND SPRING (PRE-SB 36-130, PRE-SB 36-2113);
Filter Removal

(1) Remove the plug (1) and the packing (2).

(a) Discard the packing (2).

(2) Remove the spring (3).

(3) Remove the filter (4).

D. HPC WITH FILTER ASSEMBLY/NO SPRING (POST-SB 36-130, POST-SB 36-2113);
Filter Removal

(1) Remove the filter assembly (6).

(a) Discard the packing (2,5).

2. Install the Air Filter on the High Pressure Controller (Fig. 402)

A. Consumable Materials

(1) D01062, Never-Seez, Pure Nickel Special,
NSBT-8N
(High temperature anti-seize compound)

B. Parts

3
9
6
9

EFFECTIVITY

REPLACE

36-11-08-4B

ENGINE 1 HP CONTROLLER AIR FILTER

36-011-51-1 PAGE 2 OF 5 APR 22/07

SAS



767

TASK CARD

BOEING CARD NO. 36-011-51-1
AIRLINE CARD NO.

MECH	INSP

AMM		NOMENCLATURE	AIPC		
FIG	ITEM		SUBJECT	FIG	ITEM
402	1	Plug	36-11-08	06	415
	2	Packing			420
	3	Spring			505
	4	Filter			425
	5	Packing			435
	6	Filter Assembly			430

C. References

- (1) AMM 20-10-23/401, Lockwire
- (2) AMM 24-22-00/201, Electrical Power Control
- (3) AMM 36-00-00/201, Pneumatic - General
- (4) AMM 36-11-19/401, Pressure Regulating Valve Controller
- (5) AMM 36-23-00/501, Air Supply BITE System
- (6) AMM 71-11-06/201, Core Cowl Panels
- (7) AMM 78-31-00/201, Thrust Reverser System

D. HPC WITH FILTER AND SPRING (PRE-SB 36-130, PRE-SB 36-2113); Filter Installation

- (1) Install the filter (4).
- (2) Install the spring (3).
- (3) Install a new packing (2) on the plug (1).
- (4) Put the anti-seize compound on the threads of the plug (1).
- (5) Install the plug (1).
- (6) Tighten the plug (1) to 70-80 inch-pounds.
- (7) Install the lockwire (AMM 20-10-23/401).

3
9
7
0

EFFECTIVITY

--

REPLACE

36-11-08-4B

ENGINE 1 HP CONTROLLER AIR FILTER

36-011-51-1 PAGE 3 OF 5 APR 22/07

MECH	INSP
------	------

E. HPC WITH FILTER ASSEMBLY/NO SPRING (POST-SB 36-130, POST-SB 36-2113);
Filter Installation

- (1) Install a new packing (2,5) on the filter assembly (6).
- (2) Put the anti-seize compound on the threads of the filter assembly (6).
- (3) Install the filter assembly (6).
- (4) Tighten the filter assembly (6) to 70-80 inch-pounds.
- (5) Install the lockwire (AMM 20-10-23/401).

F. Put the Airplane Back to Its Usual Condition

WARNING: OBEY THE INSTRUCTIONS IN THE PROCEDURE TO CLOSE THE THRUST REVERSERS. IF YOU DO NOT OBEY THE INSTRUCTIONS, INJURIES TO PERSONS AND DAMAGE TO EQUIPMENT CAN OCCUR.

- (1) Close the left thrust reverser, 415AL/425AL (AMM 78-31-00/201).
- (2) Close the left core cowl (AMM 71-11-06/201).
- (3) Close the left fan cowl panel, 413AL/423AL (AMM 71-11-04/201).
- (4) Do this procedure: Thrust Reverser Isolation Valve Activation (AMM 78-31-00/201).
- (5) Remove electrical power if it is not necessary (AMM 24-22-00/201).

3
9
7
1

EFFECTIVITY

REPLACE

36-11-08-4B

ENGINE 1 HP CONTROLLER AIR FILTER

36-011-51-1 PAGE 4 OF 5 APR 22/07

SAS



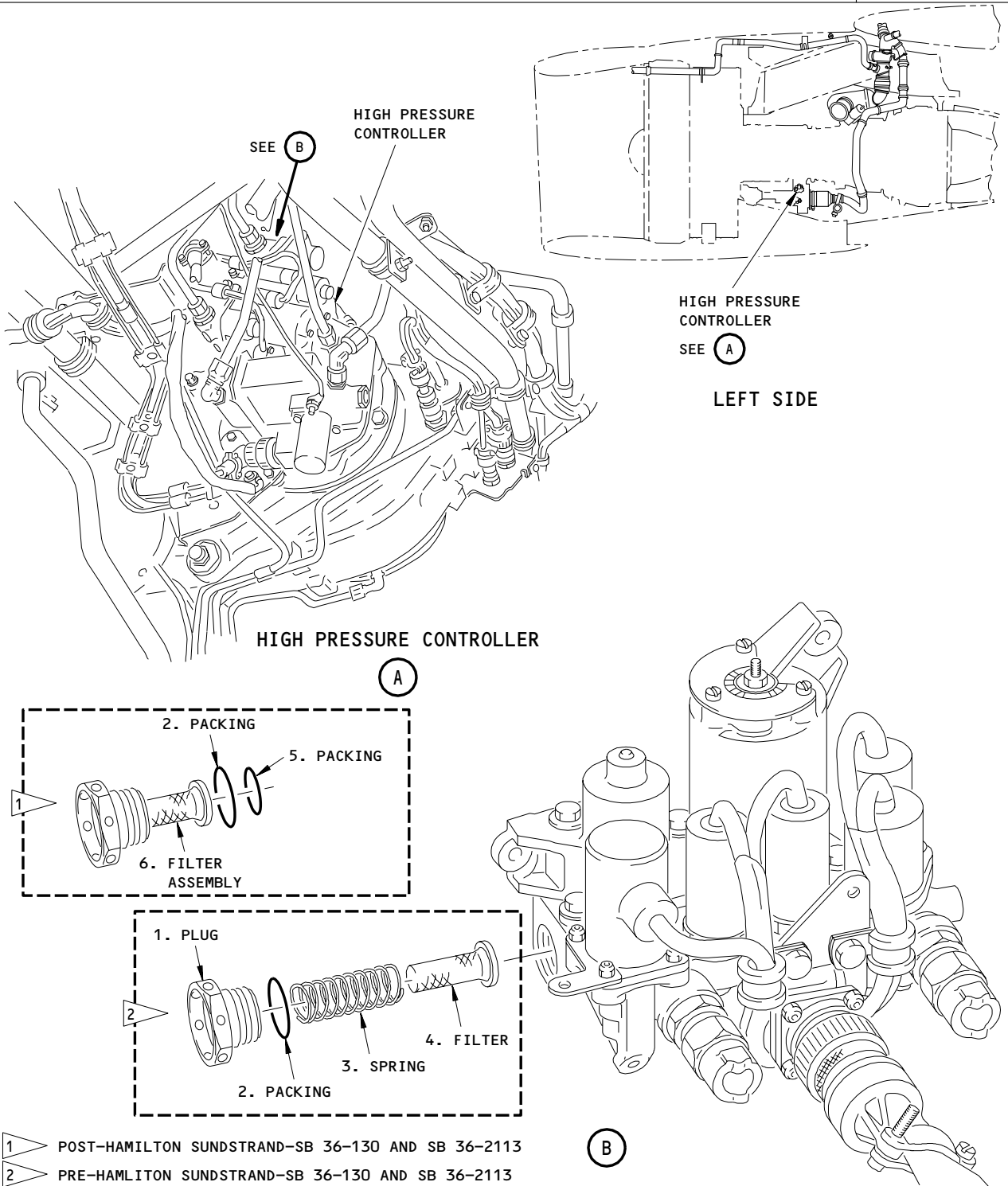
767

TASK CARD

BOEING CARD NO.

36-011-51-1

AIRLINE CARD NO.



High Pressure Controller Air Filter Installation
Figure 402

3
9
7
2

EFFECTIVITY

642584

REPLACE

36-11-08-4B

ENGINE 1 HP CONTROLLER AIR FILTER

36-011-51-1 PAGE 5 OF 5 AUG 22/06

STATION
TAIL NO.
DATE



BOEING CARD NO. 36-011-51-2
AIRLINE CARD NO.

SKILL ENGIN	WORK AREA ENGINE 2	RELATED TASK	INTERVAL 1C	PHASE 11212	MPD REV 012	TASK CARD REVISION APR 22/07
TASK REPLACE	TITLE ENGINE 2 HP CONTROLLER AIR FILTER			STRUCTURAL ILLUSTRATION REFERENCE	APPLICABILITY AIRPLANE ENGINE ALL NOTE	
ZONES 421		ACCESS PANELS 425AL 427AL				

MECH	INSP	MPD ITEM NUMBER 36-11-08-4B
<p>REPLACE THE ENGINE 2 HIGH PRESSURE CONTROLLER AIR FILTER ELEMENT WITH A SERVICEABLE FILTER ELEMENT. ENGINE NOTE: THIS TASK IS APPLICABLE TO THE 4000, 7R4, 80A AND 80C ENGINES.</p> <p>1. <u>Remove the Air Filter on the High Pressure Controller</u> (Fig. 402)</p> <p>A. References</p> <ul style="list-style-type: none"> (1) AMM 24-22-00/201, Electrical Power Control (2) AMM 36-00-00/201, Pneumatic - General (3) AMM 36-11-19/401, Pressure Regulating Valve Controller (4) AMM 36-23-00/501, Air Supply BITE System (5) AMM 71-11-06/201, Core Cowl Panels (6) AMM 78-31-00/201, Thrust Reverser System <p>B. Prepare for the Removal</p> <p>WARNING: DO THE DEACTIVATION PROCEDURE FOR THE THRUST REVERSER ISOLATION VALVE TO PREVENT THE OPERATION OF THE THRUST REVERSER. THE ACCIDENTAL OPERATION OF THE THRUST REVERSER CAN CAUSE INJURY TO PERSONS OR DAMAGE TO EQUIPMENT.</p> <ul style="list-style-type: none"> (1) Do this procedure: Thrust Reverser Isolation Valve Deactivation for Ground Maintenance (AMM 78-31-00/201). (2) Open the left fan cowl panel, 413AL/423AL (AMM 71-11-04/201). (3) Open the left core cowl panel, 417AL/427AL (AMM 71-11-06/201). 		

3 9 7 3	EFFECTIVITY	REPLACE	ENGINE 2 HP CONTROLLER AIR FILTER
		36-11-08-4B	36-011-51-2 PAGE 1 OF 5 APR 22/07

MECH	INSP
------	------

WARNING: OBEY THE INSTRUCTIONS IN THE PROCEDURE TO OPEN THE THRUST REVERSERS. IF YOU DO NOT OBEY THE INSTRUCTIONS, INJURIES TO PERSONS AND DAMAGE TO EQUIPMENT CAN OCCUR.

(4) Open the left thrust reverser, 415AL/425AL (AMM 78-31-00/201).

C. HPC WITH FILTER AND SPRING (PRE-SB 36-130, PRE-SB 36-2113);
Filter Removal

(1) Remove the plug (1) and the packing (2).

(a) Discard the packing (2).

(2) Remove the spring (3).

(3) Remove the filter (4).

D. HPC WITH FILTER ASSEMBLY/NO SPRING (POST-SB 36-130, POST-SB 36-2113);
Filter Removal

(1) Remove the filter assembly (6).

(a) Discard the packing (2,5).

2. Install the Air Filter on the High Pressure Controller (Fig. 402)

A. Consumable Materials

(1) D01062, Never-Seez, Pure Nickel Special,
NSBT-8N
(High temperature anti-seize compound)

B. Parts

3 9 7 4	EFFECTIVITY	REPLACE	ENGINE 2 HP CONTROLLER AIR FILTER
		36-11-08-4B	36-011-51-2 PAGE 2 OF 5 APR 22/07

SAS



767
TASK CARD

BOEING CARD NO.
36-011-51-2
AIRLINE CARD NO.

MECH INSP

AMM		NOMENCLATURE	AIPC		
FIG	ITEM		SUBJECT	FIG	ITEM
402	1	Plug	36-11-08	06	415
	2	Packing			420
	3	Spring			505
	4	Filter			425
	5	Packing			435
	6	Filter Assembly			430

C. References

- (1) AMM 20-10-23/401, Lockwire
- (2) AMM 24-22-00/201, Electrical Power Control
- (3) AMM 36-00-00/201, Pneumatic - General
- (4) AMM 36-11-19/401, Pressure Regulating Valve Controller
- (5) AMM 36-23-00/501, Air Supply BITE System
- (6) AMM 71-11-06/201, Core Cowl Panels
- (7) AMM 78-31-00/201, Thrust Reverser System

D. HPC WITH FILTER AND SPRING (PRE-SB 36-130, PRE-SB 36-2113); Filter Installation

- (1) Install the filter (4).
- (2) Install the spring (3).
- (3) Install a new packing (2) on the plug (1).
- (4) Put the anti-seize compound on the threads of the plug (1).
- (5) Install the plug (1).
- (6) Tighten the plug (1) to 70-80 inch-pounds.
- (7) Install the lockwire (AMM 20-10-23/401).

EFFECTIVITY

[Redacted]

REPLACE

36-11-08-4B

ENGINE 2 HP CONTROLLER AIR FILTER

36-011-51-2 PAGE 3 OF 5 APR 22/07

3
9
7
5

MECH	INSP

E. HPC WITH FILTER ASSEMBLY/NO SPRING (POST-SB 36-130, POST-SB 36-2113);
Filter Installation

- (1) Install a new packing (2,5) on the filter assembly (6).
- (2) Put the anti-seize compound on the threads of the filter assembly (6).
- (3) Install the filter assembly (6).
- (4) Tighten the filter assembly (6) to 70-80 inch-pounds.
- (5) Install the lockwire (AMM 20-10-23/401).

F. Put the Airplane Back to Its Usual Condition

WARNING: OBEY THE INSTRUCTIONS IN THE PROCEDURE TO CLOSE THE THRUST REVERSERS. IF YOU DO NOT OBEY THE INSTRUCTIONS, INJURIES TO PERSONS AND DAMAGE TO EQUIPMENT CAN OCCUR.

- (1) Close the left thrust reverser, 415AL/425AL (AMM 78-31-00/201).
- (2) Close the left core cowl (AMM 71-11-06/201).
- (3) Close the left fan cowl panel, 413AL/423AL (AMM 71-11-04/201).
- (4) Do this procedure: Thrust Reverser Isolation Valve Activation (AMM 78-31-00/201).
- (5) Remove electrical power if it is not necessary (AMM 24-22-00/201).

3
9
7
6

EFFECTIVITY

--

REPLACE

36-11-08-4B

ENGINE 2 HP CONTROLLER AIR FILTER

36-011-51-2 PAGE 4 OF 5 APR 22/07

SAS



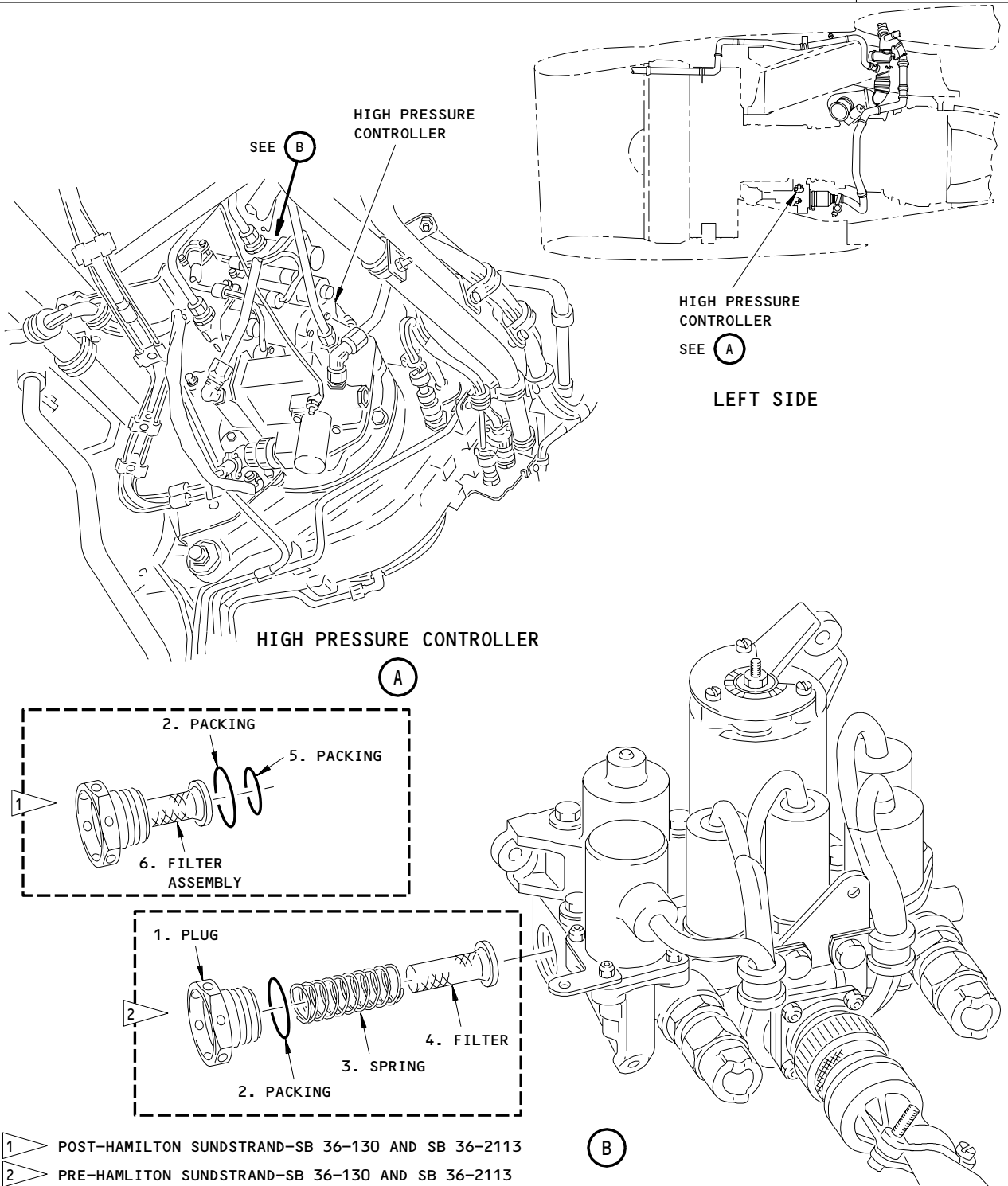
767

TASK CARD

BOEING CARD NO.

36-011-51-2

AIRLINE CARD NO.



High Pressure Controller Air Filter Installation
Figure 402

3
9
7
7

EFFECTIVITY

642584

REPLACE

36-11-08-4B

ENGINE 2 HP CONTROLLER AIR FILTER

36-011-51-2 PAGE 5 OF 5 AUG 22/06

STATION
TAIL NO.
DATE



BOEING CARD NO. 36-012-01-1
AIRLINE CARD NO.

SKILL ENGIN	WORK AREA STRUT 1	RELATED TASK	INTERVAL 1C	PHASE 11212	MPD REV 010	TASK CARD REVISION DEC 22/08
TASK REPLACE		TITLE ENGINE 1 PRSOV AIR FILTERS		STRUCTURAL ILLUSTRATION REFERENCE		APPLICABILITY AIRPLANE ENGINE ALL NOTE
ZONES 434			ACCESS PANELS 434AL			

MECH	INSP	MPD ITEM NUMBER 36-11-09-2B	
<p>REPLACE THE ENGINE 1 PRESSURE REGULATING AND SHUTOFF VALVE AIR FILTERS.</p> <p>ENGINE NOTE: THIS TASK IS APPLICABLE TO THE 4000, 7R4, 80A AND 80C ENGINES.</p> <p>1. <u>Remove the Air Supply Pressure Regulating and Shutoff Valve (PRSOV) Air Filters</u> (Fig. 202)</p> <p>A. References</p> <ul style="list-style-type: none"> (1) 06-43-00/201, Engine and Nacelle Strut Access Doors and Panels (2) 24-22-00/201, Electric Power - Control (3) 27-81-00/201, Leading Edge Slats (Activation, Deactivation) (4) 36-00-00/201, Pneumatic - General (5) 71-00-00/201, Power Plant - General (6) Remove pneumatic power (Ref 36-00-00). <p>WARNING: DO THE DEACTIVATION PROCEDURE FOR THE THRUST REVERSER ISOLATION VALVE TO PREVENT THE OPERATION OF THE THRUST REVERSER. THE ACCIDENTAL OPERATION OF THE THRUST REVERSER CAN CAUSE INJURY TO PERSONS OR DAMAGE TO EQUIPMENT.</p> <p>(7) Do this procedure: Thrust Reverser Isolation Valve Deactivation for the Ground Maintenance (Ref 78-31-00).</p>			

EFFECTIVITY	REPLACE	ENGINE 1 PRSOV AIR FILTERS
	36-11-09-2B	36-012-01-1 PAGE 1 OF 4 FEB 10/91

3
9
7
8

MECH INSP

WARNING: DO THE DEACTIVATION PROCEDURE FOR THE LEADING EDGE SLATS. THE ACCIDENTAL MOVEMENT OF THE SLATS CAN CAUSE INJURY TO PERSONS AND DAMAGE TO EQUIPMENT.

(8) Do this procedure: Leading edge slats deactivation (Ref 27-81-00).

B. Remove the PRSOV air filters.

(1) Open the left strut pressure relief door, 434AL or 444AL (Ref 06-43-00).

(2) Remove the plug (1, 5) and the packing (2, 6).

(a) Discard the packing.

(3) Remove the spring (3, 7) and the filter (4, 8) from the PRSOV.

2. Install the Air Supply Pressure Regulating and Shutoff Valve Air Filters

A. Consumable Materials

(1) D01062, Never-Seez, Pure Nickel Special, NSBT-8N (High temperature antiseize compound)

B. Parts

AMM		NOMENCLATURE	AIPC		
FIG	ITEM		SUBJECT	FIG	ITEM
202	1	Plug	36-11-01	01	259
	2	Packing			260
	3	Spring			261
	4	Filter			262
	5	Plug			263
	6	Packing			263A
	7	Spring			264
	8	Filter			264A

C. References

(1) AMM 06-43-00/201, Engine and Nacelle Strut Access Doors and Panels

EFFECTIVITY

REPLACE

36-11-09-2B

ENGINE 1 PRSOV AIR FILTERS

36-012-01-1 PAGE 2 OF 4 DEC 22/01

3
9
7
9

SAS



767

TASK CARD

BOEING CARD NO. 36-012-01-1
AIRLINE CARD NO.

MECH	INSP
------	------

- (2) AMM 20-10-23/401, Lockwire
- (3) AMM 24-22-00/201, Electric Power - Control
- (4) AMM 27-81-00/201, Leading Edge Slats (Activation, Deactivation)
- (5) AMM 36-00-00/201, Pneumatic - General
- (6) AMM 71-00-00/201, Power Plant - General

D. Procedure

- (1) Install the air filter (4, 8) and the spring (3, 7) in the PRSOV.
- (2) Install a new packing (2, 6) on the plug (1, 5).
- (3) Lubricate the threads of the plug (1, 5) with the antiseize compound.
- (4) Install the plug (1, 5) in the PRSOV.
- (5) Tighten the plug (1, 5) to 60 to 70 pound-inches.
- (6) Install the lockwire on the plug (1, 5) (AMM 20-10-23/401).

E. Put the Airplane Back to Its Usual Condition

- (1) Close the pressure relief door on the left side 434AL(444AL).
- (2) Do this procedure: Leading Edge Slats Activation (AMM 27-81-00/201).
- (3) Do this procedure: Thrust Reverser Isolation Valve Activation (Ref 78-31-00).
- (4) Remove electrical power if it is not necessary (Ref 24-22-00).

3
9
8
0

EFFECTIVITY

--

REPLACE

36-11-09-2B

ENGINE 1 PRSOV AIR FILTERS

36-012-01-1 PAGE 3 OF 4 APR 22/06

SAS



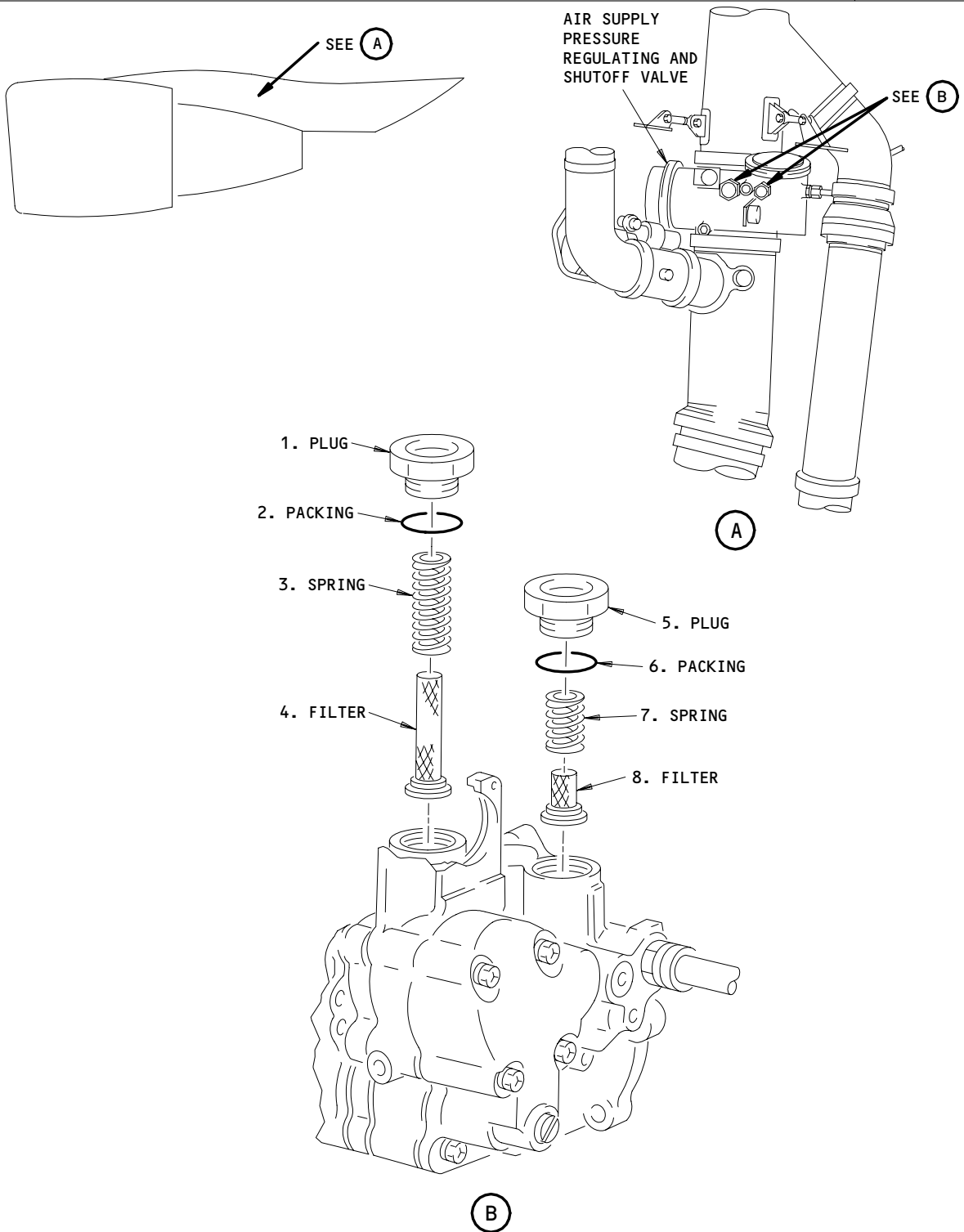
767

TASK CARD

BOEING CARD NO.

36-012-01-1

AIRLINE CARD NO.



Air Supply Pressure Regulating and Shutoff Valve Air Filters Installation
Figure 202

3
9
8
1

EFFECTIVITY

646663

REPLACE

36-11-09-2B

ENGINE 1 PRSOV AIR FILTERS

36-012-01-1 PAGE 4 OF 4 DEC 22/08

STATION
TAIL NO.
DATE



BOEING CARD NO. 36-012-01-2
AIRLINE CARD NO.

SKILL ENGIN	WORK AREA STRUT 2	RELATED TASK	INTERVAL 1C	PHASE 11212	MPD REV 010	TASK CARD REVISION DEC 22/08
TASK REPLACE		TITLE ENGINE 2 PRSOV AIR FILTERS		STRUCTURAL ILLUSTRATION REFERENCE	APPLICABILITY AIRPLANE ENGINE ALL NOTE	
ZONES 444			ACCESS PANELS 444AL			

MECH	INSP	MPD ITEM NUMBER 36-11-09-2B
<p>REPLACE THE ENGINE 2 PRESSURE REGULATING AND SHUTOFF VALVE AIR FILTERS.</p> <p>ENGINE NOTE: THIS TASK IS APPLICABLE TO THE 4000, 7R4, 80A AND 80C ENGINES.</p> <p>1. <u>Remove the Air Supply Pressure Regulating and Shutoff Valve (PRSOV) Air Filters</u> (Fig. 202)</p> <p>A. References</p> <ul style="list-style-type: none"> (1) 06-43-00/201, Engine and Nacelle Strut Access Doors and Panels (2) 24-22-00/201, Electric Power - Control (3) 27-81-00/201, Leading Edge Slats (Activation, Deactivation) (4) 36-00-00/201, Pneumatic - General (5) 71-00-00/201, Power Plant - General (6) Remove pneumatic power (Ref 36-00-00). <p>WARNING: DO THE DEACTIVATION PROCEDURE FOR THE THRUST REVERSER ISOLATION VALVE TO PREVENT THE OPERATION OF THE THRUST REVERSER. THE ACCIDENTAL OPERATION OF THE THRUST REVERSER CAN CAUSE INJURY TO PERSONS OR DAMAGE TO EQUIPMENT.</p> <p>(7) Do this procedure: Thrust Reverser Isolation Valve Deactivation for the Ground Maintenance (Ref 78-31-00).</p>		

EFFECTIVITY	REPLACE	ENGINE 2 PRSOV AIR FILTERS
	36-11-09-2B	36-012-01-2 PAGE 1 OF 4 FEB 10/91

3
9
8
2

MECH INSP

WARNING: DO THE DEACTIVATION PROCEDURE FOR THE LEADING EDGE SLATS. THE ACCIDENTAL MOVEMENT OF THE SLATS CAN CAUSE INJURY TO PERSONS AND DAMAGE TO EQUIPMENT.

(8) Do this procedure: Leading edge slats deactivation (Ref 27-81-00).

B. Remove the PRSOV air filters.

(1) Open the left strut pressure relief door, 434AL or 444AL (Ref 06-43-00).

(2) Remove the plug (1, 5) and the packing (2, 6).

(a) Discard the packing.

(3) Remove the spring (3, 7) and the filter (4, 8) from the PRSOV.

2. Install the Air Supply Pressure Regulating and Shutoff Valve Air Filters

A. Consumable Materials

(1) D01062, Never-Seez, Pure Nickel Special, NSBT-8N (High temperature antiseize compound)

B. Parts

AMM		NOMENCLATURE	AIPC		
FIG	ITEM		SUBJECT	FIG	ITEM
202	1	Plug	36-11-01	01	259
	2	Packing			260
	3	Spring			261
	4	Filter			262
	5	Plug			263
	6	Packing			263A
	7	Spring			264
	8	Filter			264A

C. References

(1) AMM 06-43-00/201, Engine and Nacelle Strut Access Doors and Panels

EFFECTIVITY

REPLACE
36-11-09-2B

ENGINE 2 PRSOV AIR FILTERS
36-012-01-2 PAGE 2 OF 4 DEC 22/01

3
9
8
3

SAS



767

TASK CARD

BOEING CARD NO. 36-012-01-2
AIRLINE CARD NO.

MECH	INSP
------	------

- (2) AMM 20-10-23/401, Lockwire
- (3) AMM 24-22-00/201, Electric Power - Control
- (4) AMM 27-81-00/201, Leading Edge Slats (Activation, Deactivation)
- (5) AMM 36-00-00/201, Pneumatic - General
- (6) AMM 71-00-00/201, Power Plant - General

D. Procedure

- (1) Install the air filter (4, 8) and the spring (3, 7) in the PRSOV.
- (2) Install a new packing (2, 6) on the plug (1, 5).
- (3) Lubricate the threads of the plug (1, 5) with the antiseize compound.
- (4) Install the plug (1, 5) in the PRSOV.
- (5) Tighten the plug (1, 5) to 60 to 70 pound-inches.
- (6) Install the lockwire on the plug (1, 5) (AMM 20-10-23/401).

E. Put the Airplane Back to Its Usual Condition

- (1) Close the pressure relief door on the left side 434AL(444AL).
- (2) Do this procedure: Leading Edge Slats Activation (AMM 27-81-00/201).
- (3) Do this procedure: Thrust Reverser Isolation Valve Activation (Ref 78-31-00).
- (4) Remove electrical power if it is not necessary (Ref 24-22-00).

3
9
8
4

EFFECTIVITY



REPLACE

36-11-09-2B

ENGINE 2 PRSOV AIR FILTERS

36-012-01-2 PAGE 3 OF 4 APR 22/06

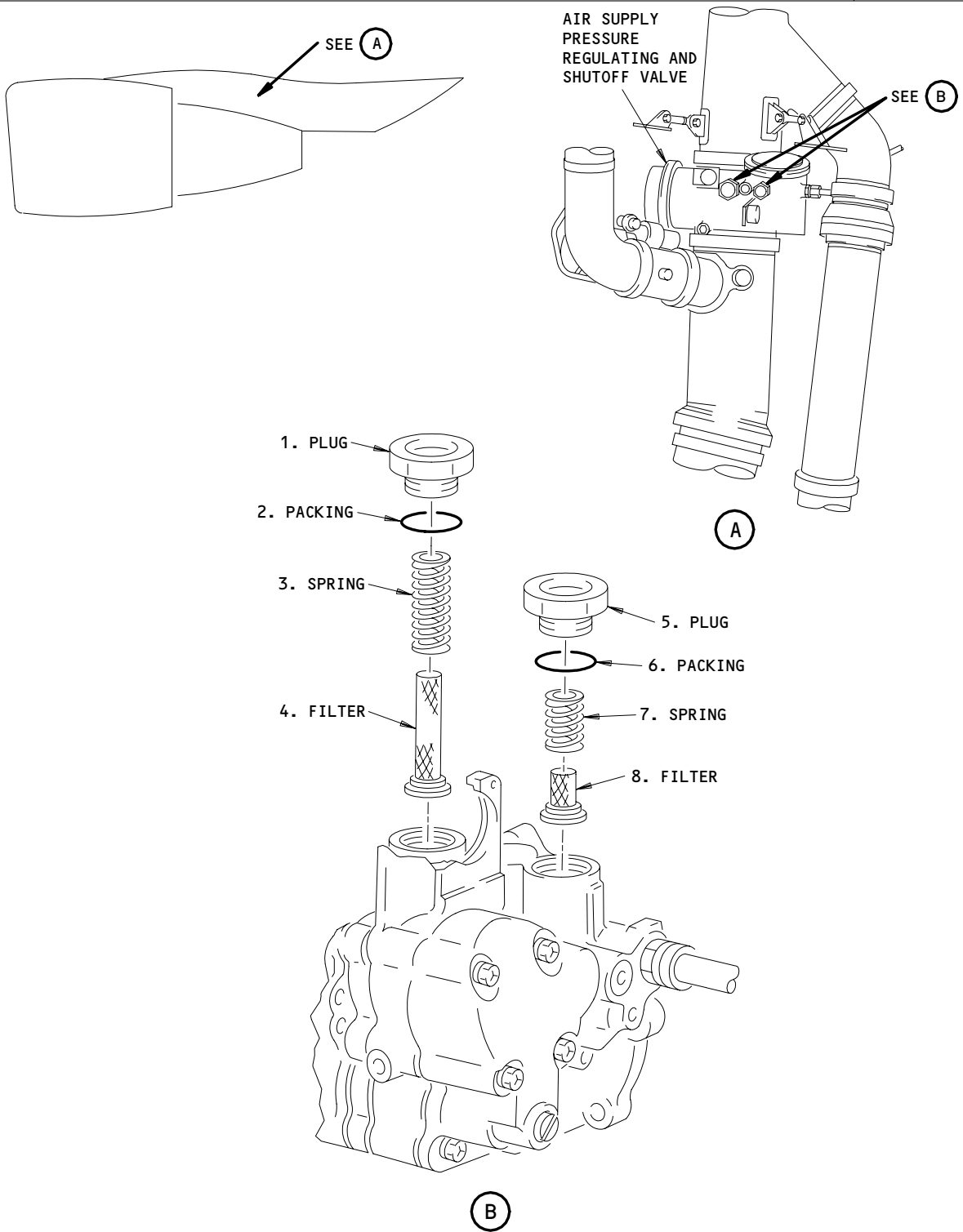
SAS



767

TASK CARD

BOEING CARD NO. 36-012-01-2
AIRLINE CARD NO.



Air Supply Pressure Regulating and Shutoff Valve Air Filters Installation
Figure 202

3
9
8
5

EFFECTIVITY

REPLACE

ENGINE 2 PRSOV AIR FILTERS

36-11-09-2B

36-012-01-2 PAGE 4 OF 4 DEC 22/08

STATION
TAIL NO.
DATE



BOEING CARD NO. 36-013-01-1
AIRLINE CARD NO.

SKILL ENGIN	WORK AREA ENGINE 1	RELATED TASK	INTERVAL 1C	PHASE 11212	MPD REV 013	TASK CARD REVISION AUG 22/04
TASK REPLACE		TITLE FAN AIR MODULATING VALVE AIR FILTER		STRUCTURAL ILLUSTRATION REFERENCE		APPLICABILITY AIRPLANE ALL ENGINE NOTE
ZONES 411			ACCESS PANELS 416AR			

MECH	INSP	MPD ITEM NUMBER 36-11-16-4A	
		<p>REPLACE THE ENGINE 1 FAN AIR MODULATING VALVE AIR FILTER.</p> <p>ENGINE NOTE: THIS TASK IS APPLICABLE TO THE 4000 AND 7R4 ENGINES.</p> <p>1. <u>Remove the Air Filter for the Fan Air Modulating Valve</u> (Fig. 402)</p> <p>A. References</p> <ul style="list-style-type: none"> (1) AMM 06-41-00/201, Fuselage Access Doors and Panels (2) AMM 24-22-00/201, Electric Power Control (3) AMM 27-81-00/201, Leading Edge Slat System (4) AMM 36-00-00/201, Air Supply - General (5) AMM 54-52-01/401, Strut Fairings (6) AMM 78-31-00/201, Thrust Reverser System <p>B. Prepare for Removal</p> <ul style="list-style-type: none"> (1) Apply electrical power (AMM 24-22-00/201). (2) Remove the pneumatic power (AMM 36-00-00/201). (3) Do the deactivation procedure for the leading edge slats (AMM 27-81-00/201). (4) As an option for access without opening the thrust reversers, remove the core cowl skirt fairing 436CR(446CR) (AMM 54-52-01/401). 	

3 9 8 6	EFFECTIVITY	REPLACE	FAN AIR MODULATING VALVE AIR FILTER
		36-11-16-4A	36-013-01-1 PAGE 1 OF 5 AUG 22/04

MECH	INSP

WARNING: MAKE SURE THE FAN COWL PANELS AND CORE COWL PANELS ARE OPEN BEFORE YOU OPEN THE FAN DUCT COWL AND THRUST REVERSER. FAILURE TO OBEY COULD CAUSE INJURY TO PERSONS AND DAMAGE TO EQUIPMENT.

C. Air Filter Removal

- (1) Remove the plug (1) and packing (2).
 - (a) Discard the packing.
- (2) Remove the spring (3) and air filter (4) from the modulating valve.
- (3) Remove the sleeve (5) and packing (6) from the modulating valve.
 - (a) Discard the packing (6).

2. Install the Air Filter for the Fan Air Modulating Valve

A. Consumable Materials

- (1) D01062, Never-Seez, Pure Nickel Special, NSBT-8N
(High temperature anti-seize compound)

B. Parts

AMM		NOMENCLATURE	AIPC		
FIG	ITEM		SUBJECT	FIG	ITEM
402	1	Plug	36-12-02	02	380
	2	Packing			385
	3	Spring			390
	4	Filter			395
	5	Sleeve			397
	6	Packing			398

C. References

- (1) AMM 06-41-00/201, Fuselage Access Doors and Panels
- (2) AMM 24-22-00/201, Electric Power Control

EFFECTIVITY

--

REPLACE

36-11-16-4A

FAN AIR MODULATING VALVE AIR FILTER

36-013-01-1 PAGE 2 OF 5 AUG 22/04

3
9
8
7

MECH	INSP
------	------

- (3) AMM 27-81-00/201, Leading Edge Slat System
- (4) AMM 36-00-00/201, Air Supply - General
- (5) AMM 54-52-01/401, Strut Fairings
- (6) AMM 78-31-00/201, Thrust Reverser System

D. Air Filter Installation

CAUTION: DO NOT INSTALL THE SLEEVE (5) UPSIDE DOWN. FAILURE OF THE VALVE CAN RESULT.

- (1) Install a new packing (6) and sleeve (5) in the modulating valve.

NOTE: Single hole end of sleeve (5) should face out.

- (2) Install the air filter (4) and spring (3) in the modulating valve.
- (3) Install a new packing (2) on the plug (1).
- (4) Lubricate the threads of the plug (1) with the anti-seize compound.
- (5) Install the plug (1) in the fan air modulating valve.
- (6) Tighten the plug (1) to 20 to 30 inch-pounds.
- (7) Install the lockwire.

E. Put the Airplane Back To It's Usual Condition

WARNING: OBEY THE INSTRUCTIONS IN AMM 78-31-00/201. INJURY TO PERSONS AND DAMAGE TO THE FAN COWL, CORE COWL, FAN DUCT COWL, AND THRUST REVERSER COULD OCCUR.

- (1) Close the right half of the fan thrust reverser (AMM 78-31-00/201).
- (2) Do the activation procedure for the leading edge slats (Ref 27-81-00).

EFFECTIVITY

REPLACE

36-11-16-4A

FAN AIR MODULATING VALVE AIR FILTER

36-013-01-1 PAGE 3 OF 5 AUG 22/04

3
9
8
8

SAS  **BOEING**
767
TASK CARD

BOEING CARD NO. 36-013-01-1
AIRLINE CARD NO.

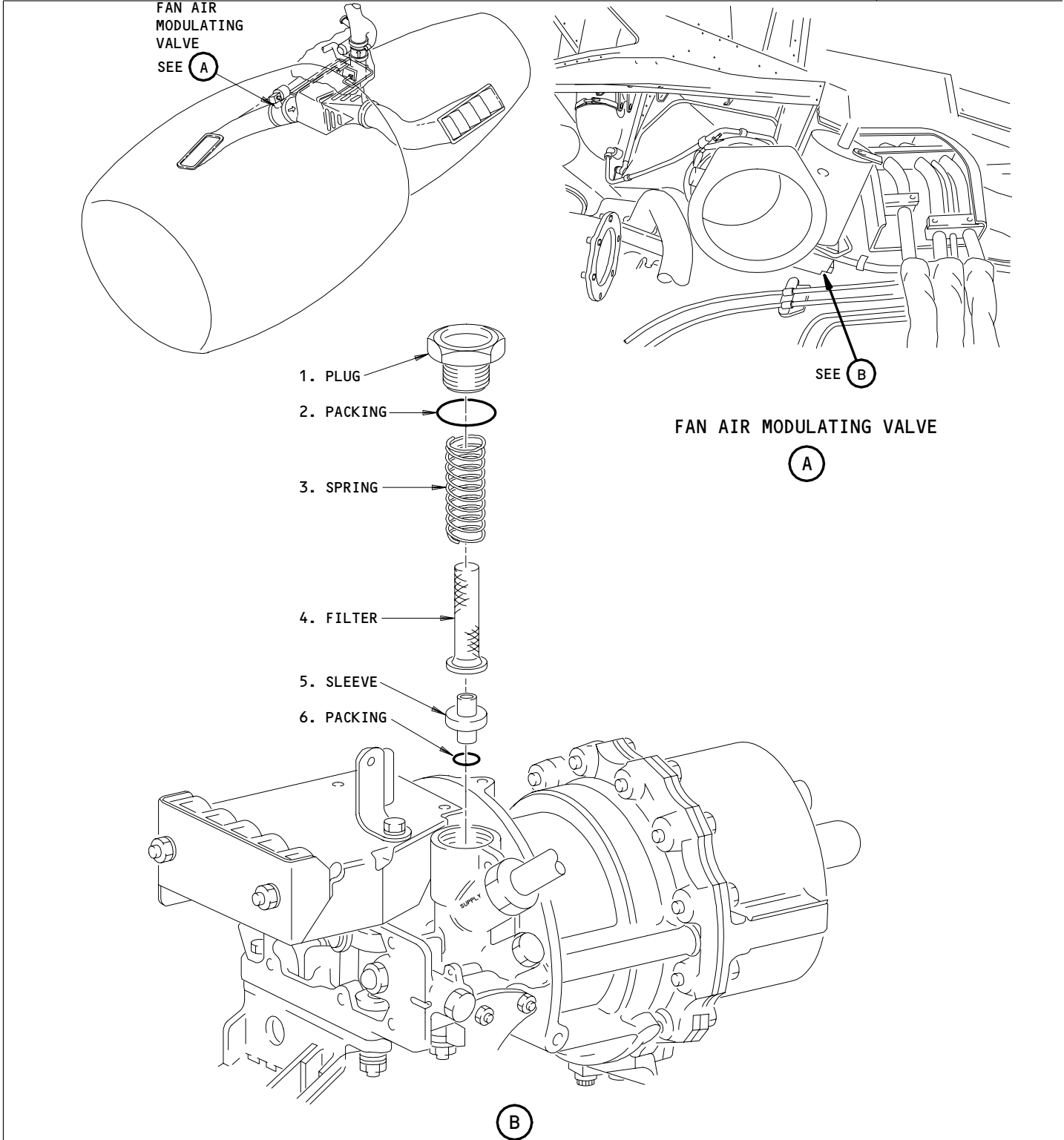
MECH	INSP
------	------

- (3) If it was removed install the core cowl skirt fairing 436CR(446CR) (AMM 54-52-01/401).
- (4) Remove electrical power if it is not necessary (AMM 24-22-00/201).

3
9
8
9

EFFECTIVITY	REPLACE	FAN AIR MODULATING VALVE AIR FILTER
	36-11-16-4A	36-013-01-1 PAGE 4 OF 5 AUG 22/04

SAS  **BOEING**
 767
TASK CARD



Fan Air Modulating Valve Air Filter Installation
 Fig 402

3
9
9
0

EFFECTIVITY

643342

--

REPLACE
36-11-16-4A

FAN AIR MODULATING VALVE AIR FILTER
36-013-01-1 PAGE 5 OF 5 APR 22/03

STATION
TAIL NO.
DATE



BOEING CARD NO. 36-013-01-2
AIRLINE CARD NO.

SKILL ENGIN	WORK AREA ENGINE 2	RELATED TASK	INTERVAL 1C	PHASE 11212	MPD REV 013	TASK CARD REVISION AUG 22/04
TASK REPLACE		TITLE FAN AIR MODULATING VALVE AIR FILTER		STRUCTURAL ILLUSTRATION REFERENCE	APPLICABILITY AIRPLANE ENGINE ALL NOTE	
ZONES 421		ACCESS PANELS 426AR				

MECH	INSP	MPD ITEM NUMBER 36-11-16-4A
		<p>REPLACE THE ENGINE 2 FAN AIR MODULATING VALVE AIR FILTER.</p> <p>ENGINE NOTE: THIS TASK IS APPLICABLE TO THE 4000 AND 7R4 ENGINES.</p> <p>1. <u>Remove the Air Filter for the Fan Air Modulating Valve</u> (Fig. 402)</p> <p>A. References</p> <ul style="list-style-type: none"> (1) AMM 06-41-00/201, Fuselage Access Doors and Panels (2) AMM 24-22-00/201, Electric Power Control (3) AMM 27-81-00/201, Leading Edge Slat System (4) AMM 36-00-00/201, Air Supply - General (5) AMM 54-52-01/401, Strut Fairings (6) AMM 78-31-00/201, Thrust Reverser System <p>B. Prepare for Removal</p> <ul style="list-style-type: none"> (1) Apply electrical power (AMM 24-22-00/201). (2) Remove the pneumatic power (AMM 36-00-00/201). (3) Do the deactivation procedure for the leading edge slats (AMM 27-81-00/201). (4) As an option for access without opening the thrust reversers, remove the core cowl skirt fairing 436CR(446CR) (AMM 54-52-01/401).

3 9 9 1	EFFECTIVITY	REPLACE	FAN AIR MODULATING VALVE AIR FILTER
		36-11-16-4A	36-013-01-2 PAGE 1 OF 5 AUG 22/04

MECH INSP

WARNING: MAKE SURE THE FAN COWL PANELS AND CORE COWL PANELS ARE OPEN BEFORE YOU OPEN THE FAN DUCT COWL AND THRUST REVERSER. FAILURE TO OBEY COULD CAUSE INJURY TO PERSONS AND DAMAGE TO EQUIPMENT.

C. Air Filter Removal

- (1) Remove the plug (1) and packing (2).
 - (a) Discard the packing.
- (2) Remove the spring (3) and air filter (4) from the modulating valve.
- (3) Remove the sleeve (5) and packing (6) from the modulating valve.
 - (a) Discard the packing (6).

2. Install the Air Filter for the Fan Air Modulating Valve

A. Consumable Materials

- (1) D01062, Never-Seez, Pure Nickel Special, NSBT-8N
(High temperature anti-seize compound)

B. Parts

AMM		NOMENCLATURE	AIPC		
FIG	ITEM		SUBJECT	FIG	ITEM
402	1	Plug	36-12-02	02	380
	2	Packing			385
	3	Spring			390
	4	Filter			395
	5	Sleeve			397
	6	Packing			398

C. References

- (1) AMM 06-41-00/201, Fuselage Access Doors and Panels
- (2) AMM 24-22-00/201, Electric Power Control

EFFECTIVITY

REPLACE

36-11-16-4A

FAN AIR MODULATING VALVE AIR FILTER

36-013-01-2 PAGE 2 OF 5 AUG 22/04

3
9
9
2

MECH	INSP
------	------

- (3) AMM 27-81-00/201, Leading Edge Slat System
- (4) AMM 36-00-00/201, Air Supply - General
- (5) AMM 54-52-01/401, Strut Fairings
- (6) AMM 78-31-00/201, Thrust Reverser System

D. Air Filter Installation

CAUTION: DO NOT INSTALL THE SLEEVE (5) UPSIDE DOWN. FAILURE OF THE VALVE CAN RESULT.

- (1) Install a new packing (6) and sleeve (5) in the modulating valve.

NOTE: Single hole end of sleeve (5) should face out.

- (2) Install the air filter (4) and spring (3) in the modulating valve.
- (3) Install a new packing (2) on the plug (1).
- (4) Lubricate the threads of the plug (1) with the anti-seize compound.
- (5) Install the plug (1) in the fan air modulating valve.
- (6) Tighten the plug (1) to 20 to 30 inch-pounds.
- (7) Install the lockwire.

E. Put the Airplane Back To It's Usual Condition

WARNING: OBEY THE INSTRUCTIONS IN AMM 78-31-00/201. INJURY TO PERSONS AND DAMAGE TO THE FAN COWL, CORE COWL, FAN DUCT COWL, AND THRUST REVERSER COULD OCCUR.

- (1) Close the right half of the fan thrust reverser (AMM 78-31-00/201).
- (2) Do the activation procedure for the leading edge slats (Ref 27-81-00).

EFFECTIVITY



REPLACE

36-11-16-4A

FAN AIR MODULATING VALVE AIR FILTER

36-013-01-2 PAGE 3 OF 5 AUG 22/04

3
9
9
3

SAS  **BOEING**
767
TASK CARD

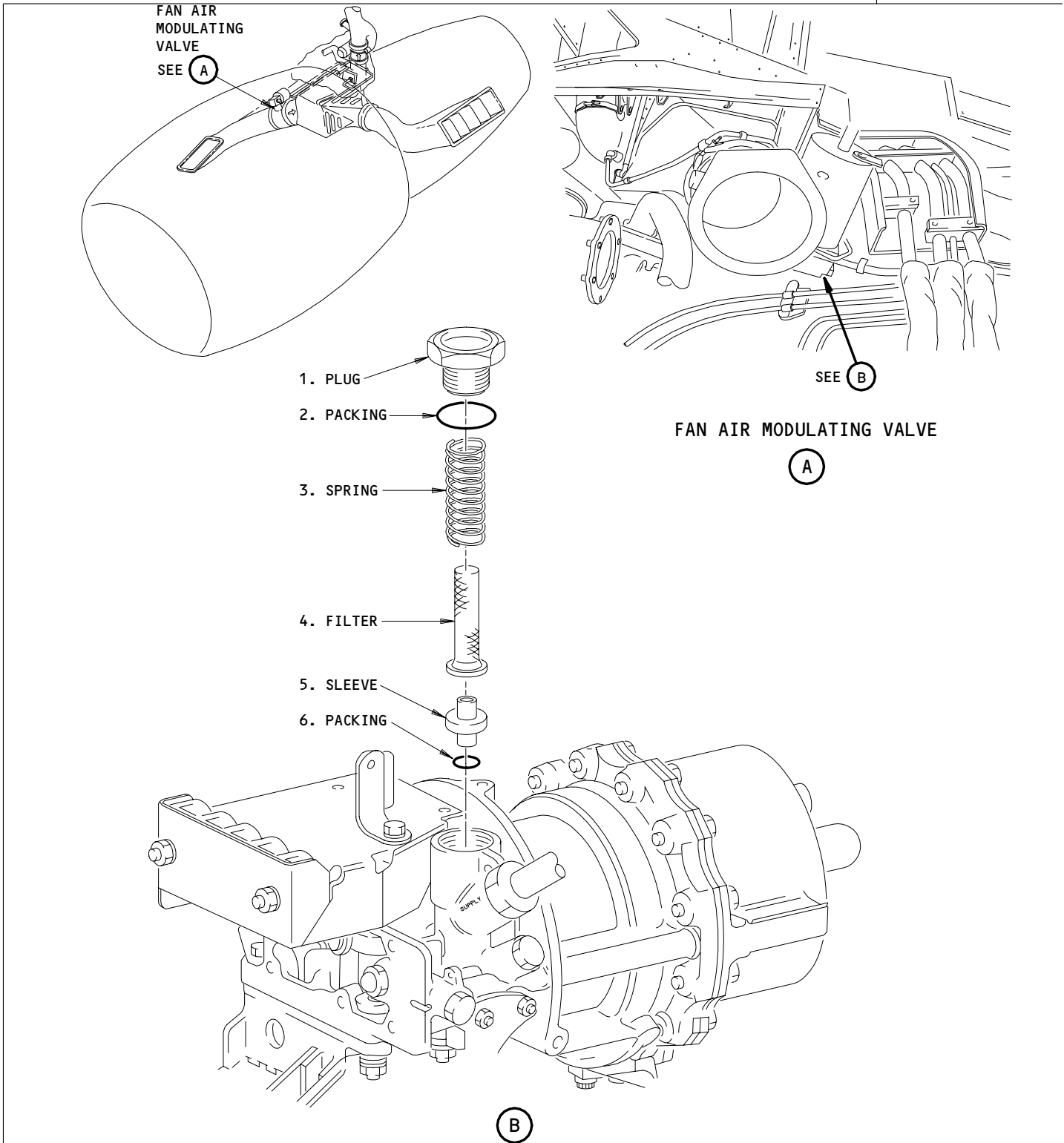
BOEING CARD NO. 36-013-01-2
AIRLINE CARD NO.

MECH	INSP
------	------

- (3) If it was removed install the core cowl skirt fairing 436CR(446CR) (AMM 54-52-01/401).
- (4) Remove electrical power if it is not necessary (AMM 24-22-00/201).

3 9 9 4	EFFECTIVITY	REPLACE	FAN AIR MODULATING VALVE AIR FILTER
		36-11-16-4A	36-013-01-2 PAGE 4 OF 5 AUG 22/04

SAS **BOEING** 767
 TASK CARD



Fan Air Modulating Valve Air Filter Installation
 Fig 402

3
 9
 9
 5

EFFECTIVITY

643342

REPLACE

36-11-16-4A

FAN AIR MODULATING VALVE AIR FILTER

36-013-01-2 PAGE 5 OF 5 APR 22/03

STATION
TAIL NO.
DATE



BOEING CARD NO. 36-014-02-1
AIRLINE CARD NO.

SKILL ENGIN	WORK AREA ENGINE 1	RELATED TASK	INTERVAL 1C	PHASE 11212	MPD REV 010	TASK CARD REVISION APR 22/05
TASK REPLACE		TITLE ENGINE 1 PRV CONTROLLER AIR FILTER		STRUCTURAL ILLUSTRATION REFERENCE	APPLICABILITY AIRPLANE ENGINE ALL NOTE	
ZONES 413		ACCESS PANELS 413AL 415AL				

MECH	INSP	MPD ITEM NUMBER 36-11-19-4B	
		<p>REPLACE THE ENGINE 1 PRESSURE REGULATING VALVE CONTROLLER AIR FILTER.</p> <p>ENGINE NOTE: APPLICABLE TO PW4000 ENGINES.</p> <p>1. <u>PRVC Air Filter Removal</u> (Fig. 401)</p> <p>A. References</p> <ul style="list-style-type: none"> (1) AMM 24-22-00/201, Electrical Power Control (2) AMM 36-00-00/201, Pneumatic System (3) AMM 71-11-04/201, Fan Cowl Panels (4) AMM 71-11-06/201, Core Cowl Panels (5) AMM 78-31-00/201, Thrust Reverser System <p>B. Access</p> <ul style="list-style-type: none"> (1) Location Zones <ul style="list-style-type: none"> 410 No. 1 Power Plant (Left engine) 420 No. 2 Power Plant (Right engine) (2) Access Panels <ul style="list-style-type: none"> 413AL Left Fan Cowl (Left engine) 415AL Left Thrust Reverser (Left engine) 417AL Left Core Cowl (Left engine) 423AL Left Fan Cowl (Right engine) 425AL Left Thrust Reverser (Right engine) 427AL Left Core Cowl (Right engine) 	

3 9 9 6	EFFECTIVITY	REPLACE	ENGINE 1 PRV CONTROLLER AIR FILTER
		36-11-19-4B	36-014-02-1 PAGE 1 OF 7 APR 22/05

MECH	INSP

C. Prepare for Removal

- (1) Remove the pressure from the pneumatic system (AMM 36-00-00/201).
- (2) Get access to the Pressure Regulating Valve Controller (PRVC) on the 'left' side of the associated (left/right) engine:

WARNING: DO THE DEACTIVATION PROCEDURE TO PREVENT THE OPERATION OF THE THRUST REVERSER. THE ACCIDENTAL OPERATION OF THE THRUST REVERSER CAN CAUSE INJURIES TO PERSONS AND DAMAGE TO EQUIPMENT.

- (a) Do the deactivation procedure for the thrust reversers for ground maintenance (AMM 78-31-00/201).
- (b) Open the associated left fan cowl panel (413AL/423AL) (AMM 71-11-04/201).
- (c) Open the associated left core cowl panel (417AL/427AL) (AMM 71-11-06/201).

WARNING: OBEY THE INSTRUCTIONS IN THE PROCEDURE TO OPEN THE THRUST REVERSERS. IF YOU DO NOT OBEY THE INSTRUCTIONS, INJURIES TO PERSONS AND DAMAGE TO EQUIPMENT CAN OCCUR.

- (d) Open the associated left thrust reverser (415AL/425AL) (AMM 78-31-00/201).

D. PRV Controller Air Filter Removal

- (1) Remove the filter plug (27) and packing (28).
 - (a) Discard the packing (28).
- (2) Remove the spring (29) and the filter (30) from the PRV controller (1).

2. PRVC Air Filter Installation (Fig. 401)

A. Parts

- (1) Refer to the Illustrated Parts Catalog (IPC) for the part numbers and the effectivities of the items in the table that follows:

EFFECTIVITY

	REPLACE	ENGINE 1 PRV CONTROLLER AIR FILTER
	36-11-19-4B	36-014-02-1 PAGE 2 OF 7 APR 22/05

3
9
9
7

MECH INSP

AMM		NOMENCLATURE	AIPC		
FIG	ITEM		SUBJECT	FIG	ITEM
401	1	PRV Controller	36-11-08	06	450,490
	28	Packing	36-11-08	06	460,500
	30	Filter	36-11-08	06	470,510
401	1	PRV Controller	36-11-08	07	35
	28	Packing	36-11-08	07	45
	30	Filter	36-11-08	07	55,60

B. Consumable Materials

- (1) D01062, Never-Seez, Pure Nickel Special, NSBT-8N
(High temperature anti-seize compound)

C. References

- (1) AMM 20-10-23/401, Lockwire
- (2) AMM 24-22-00/201, Electrical Power Control
- (3) AMM 71-11-04/201, Fan Cowl Panels
- (4) AMM 71-11-06/201, Core Cowl Panels
- (5) AMM 78-31-00/201, Thrust Reverser System

D. Access

- (1) Location Zones
 - 410 No. 1 Power Plant (Left engine)
 - 420 No. 2 Power Plant (Right engine)

3
9
9
8

EFFECTIVITY

REPLACE

36-11-19-4B

ENGINE 1 PRV CONTROLLER AIR FILTER

36-014-02-1 PAGE 3 OF 7 APR 22/05

SAS



767

TASK CARD

BOEING CARD NO. 36-014-02-1
AIRLINE CARD NO.

MECH	INSP

(2) Access Panels

- 413AL Left Fan Cowl (Left engine)
- 415AL Left Thrust Reverser (Left engine)
- 417AL Left Core Cowl (Left engine)

- 423AL Left Fan Cowl (Right engine)
- 425AL Left Thrust Reverser (Right engine)
- 427AL Left Core Cowl (Right engine)

E. PRV Controller Air Filter Installation

- (1) Install the filter (30) and the spring (29) in the PRV controller (1).
- (2) Install a new packing (28) on the filter plug (27).
- (3) Lubricate the filter plug (27) threads with the antiseize compound.
- (4) Install the filter plug (27) in the PRV controller (1).
- (5) Tighten the filter plug (27) to 10-20 pound-inches.
- (6) Install the lockwire (AMM 20-10-23/401).

F. Put the Airplane Back To It's Usual Condition

- (1) Close up the access to the Pressure Regulating Valve Controller (PRVC) on the 'left' side of the associated (left/right) engine:

WARNING: OBEY THE INSTRUCTIONS IN THE PROCEDURE TO CLOSE THE THRUST REVERSERS. IF YOU DO NOT OBEY THE INSTRUCTIONS, INJURIES TO PERSONS AND DAMAGE TO EQUIPMENT CAN OCCUR.

- (a) Close the associated left thrust reverser (415AL/425AL) (AMM 78-31-00/201).
- (b) Close the associated left core cowl panel (417AL/427AL) (AMM 71-11-06/201).
- (c) Close the associated left fan cowl panel (413AL/423AL) (AMM 71-11-04/201).
- (d) Do the activation procedure for the thrust reversers for ground maintenance (AMM 78-31-00/201).

3
9
9
9

EFFECTIVITY

--

REPLACE

36-11-19-4B

ENGINE 1 PRV CONTROLLER AIR FILTER

36-014-02-1 PAGE 4 OF 7 APR 22/05

MECH	INSP
------	------

(2) Remove electrical power if it is not necessary (AMM 24-22-00/201).

4
0
0
0

EFFECTIVITY



REPLACE
36-11-19-4B

ENGINE 1 PRV CONTROLLER AIR FILTER
36-014-02-1 PAGE 5 OF 7 APR 22/05

SAS



767

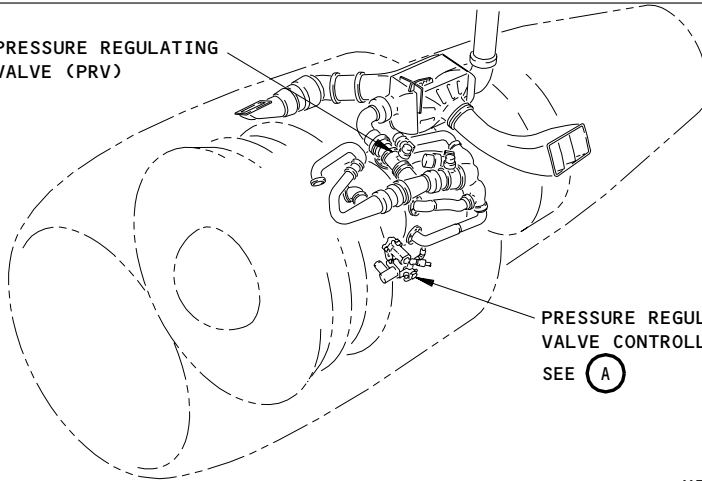
TASK CARD

BOEING CARD NO.

36-014-02-1

AIRLINE CARD NO.

PRESSURE REGULATING VALVE (PRV)

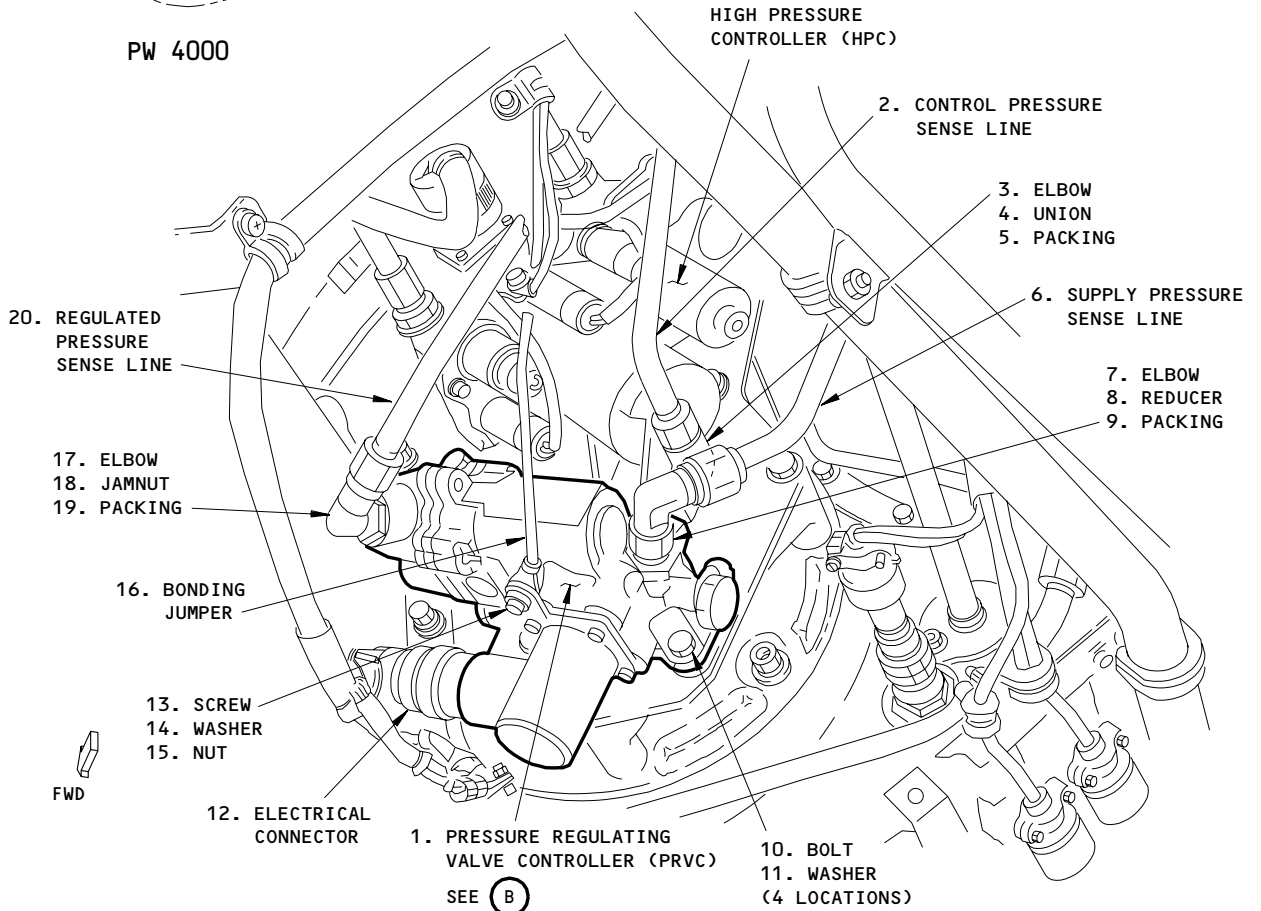


PRESSURE REGULATING VALVE CONTROLLER (PRVC)

SEE (A)

PW 4000

HIGH PRESSURE CONTROLLER (HPC)



2. CONTROL PRESSURE SENSE LINE

3. ELBOW

4. UNION

5. PACKING

6. SUPPLY PRESSURE SENSE LINE

7. ELBOW

8. REDUCER

9. PACKING

20. REGULATED PRESSURE SENSE LINE

17. ELBOW

18. JAMNUT

19. PACKING

16. BONDING JUMPER

13. SCREW

14. WASHER

15. NUT

FWD

12. ELECTRICAL CONNECTOR

1. PRESSURE REGULATING VALVE CONTROLLER (PRVC)

SEE (B)

10. BOLT

11. WASHER

(4 LOCATIONS)

PRESSURE REGULATING VALVE CONTROLLER (PRVC)

(A)

Pressure Regulating Valve Controller (PRVC) Figure 401 (Sheet 1)

4
0
0
1

EFFECTIVITY

373225

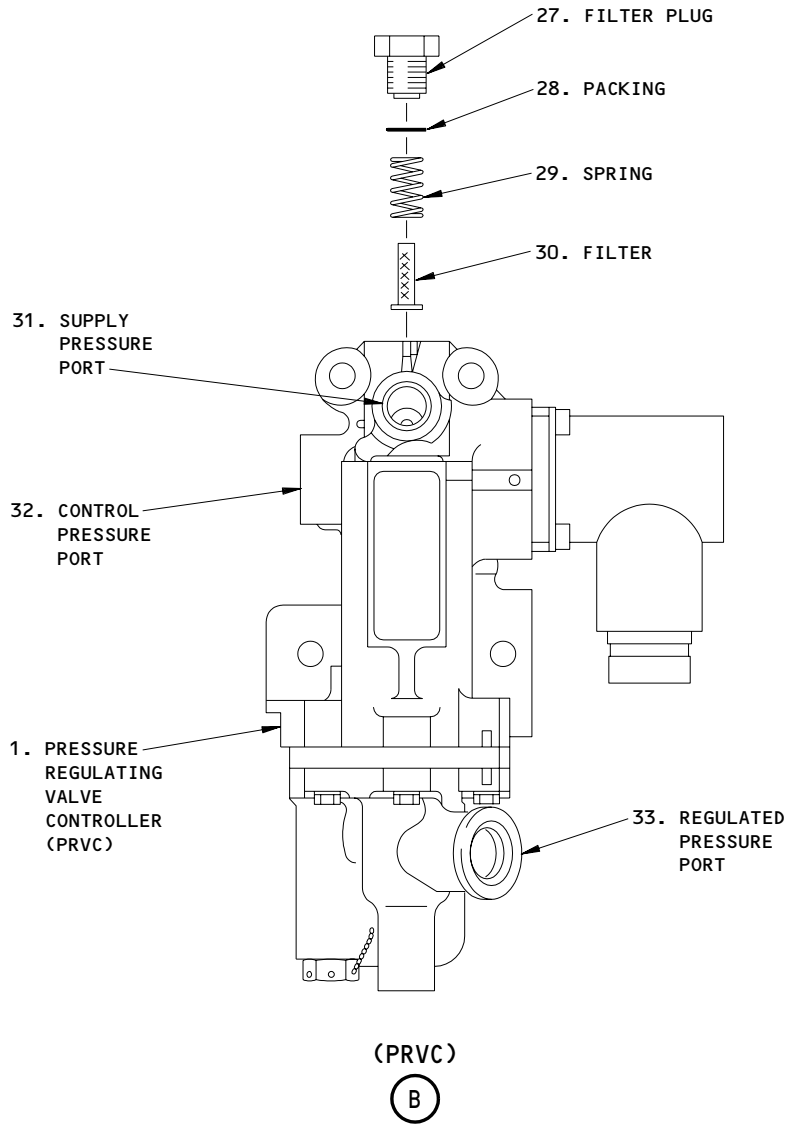
REPLACE

36-11-19-4B

ENGINE 1 PRV CONTROLLER AIR FILTER

36-014-02-1 PAGE 6 OF 7 APR 22/05

SAS



Pressure Regulating Valve Controller (PRVC)
Figure 401 (Sheet 2)

4
0
0
2

EFFECTIVITY

373217

REPLACE

36-11-19-4B

ENGINE 1 PRV CONTROLLER AIR FILTER

36-014-02-1 PAGE 7 OF 7 APR 22/05

STATION
TAIL NO.
DATE



BOEING CARD NO. 36-014-02-2
AIRLINE CARD NO.

SKILL ENGIN	WORK AREA ENGINE 2	RELATED TASK	INTERVAL 1C	PHASE 11212	MPD REV 010	TASK CARD REVISION APR 22/05
TASK REPLACE		TITLE ENGINE 2 PRV CONTROLLER AIR FILTER		STRUCTURAL ILLUSTRATION REFERENCE	APPLICABILITY AIRPLANE ENGINE ALL NOTE	
ZONES 423		ACCESS PANELS 423AL 425AL				

MECH	INSP	MPD ITEM NUMBER 36-11-19-4B	
		<p>REPLACE THE ENGINE 2 PRESSURE REGULATING VALVE CONTROLLER AIR FILTER.</p> <p>ENGINE NOTE: APPLICABLE TO PW4000 ENGINES.</p> <p>1. <u>PRVC Air Filter Removal</u> (Fig. 401)</p> <p>A. References</p> <p>(1) AMM 24-22-00/201, Electrical Power Control</p> <p>(2) AMM 36-00-00/201, Pneumatic System</p> <p>(3) AMM 71-11-04/201, Fan Cowl Panels</p> <p>(4) AMM 71-11-06/201, Core Cowl Panels</p> <p>(5) AMM 78-31-00/201, Thrust Reverser System</p> <p>B. Access</p> <p>(1) Location Zones</p> <p>410 No. 1 Power Plant (Left engine)</p> <p>420 No. 2 Power Plant (Right engine)</p> <p>(2) Access Panels</p> <p>413AL Left Fan Cowl (Left engine)</p> <p>415AL Left Thrust Reverser (Left engine)</p> <p>417AL Left Core Cowl (Left engine)</p> <p>423AL Left Fan Cowl (Right engine)</p> <p>425AL Left Thrust Reverser (Right engine)</p> <p>427AL Left Core Cowl (Right engine)</p>	

4 0 0 3	EFFECTIVITY	REPLACE	ENGINE 2 PRV CONTROLLER AIR FILTER
		36-11-19-4B	36-014-02-2 PAGE 1 OF 7 APR 22/05

MECH	INSP

C. Prepare for Removal

- (1) Remove the pressure from the pneumatic system (AMM 36-00-00/201).
- (2) Get access to the Pressure Regulating Valve Controller (PRVC) on the 'left' side of the associated (left/right) engine:

WARNING: DO THE DEACTIVATION PROCEDURE TO PREVENT THE OPERATION OF THE THRUST REVERSER. THE ACCIDENTAL OPERATION OF THE THRUST REVERSER CAN CAUSE INJURIES TO PERSONS AND DAMAGE TO EQUIPMENT.

- (a) Do the deactivation procedure for the thrust reversers for ground maintenance (AMM 78-31-00/201).
- (b) Open the associated left fan cowl panel (413AL/423AL) (AMM 71-11-04/201).
- (c) Open the associated left core cowl panel (417AL/427AL) (AMM 71-11-06/201).

WARNING: OBEY THE INSTRUCTIONS IN THE PROCEDURE TO OPEN THE THRUST REVERSERS. IF YOU DO NOT OBEY THE INSTRUCTIONS, INJURIES TO PERSONS AND DAMAGE TO EQUIPMENT CAN OCCUR.

- (d) Open the associated left thrust reverser (415AL/425AL) (AMM 78-31-00/201).

D. PRV Controller Air Filter Removal

- (1) Remove the filter plug (27) and packing (28).
 - (a) Discard the packing (28).
- (2) Remove the spring (29) and the filter (30) from the PRV controller (1).

2. PRVC Air Filter Installation (Fig. 401)

A. Parts

- (1) Refer to the Illustrated Parts Catalog (IPC) for the part numbers and the effectivities of the items in the table that follows:

EFFECTIVITY

	REPLACE	ENGINE 2 PRV CONTROLLER AIR FILTER
	36-11-19-4B	36-014-02-2 PAGE 2 OF 7 APR 22/05

4
0
0
4

MECH INSP

AMM		NOMENCLATURE	AIPC		
FIG	ITEM		SUBJECT	FIG	ITEM
401	1	PRV Controller	36-11-08	06	450,490
	28	Packing	36-11-08	06	460,500
	30	Filter	36-11-08	06	470,510
401	1	PRV Controller	36-11-08	07	35
	28	Packing	36-11-08	07	45
	30	Filter	36-11-08	07	55,60

B. Consumable Materials

- (1) D01062, Never-Seez, Pure Nickel Special, NSBT-8N
(High temperature anti-seize compound)

C. References

- (1) AMM 20-10-23/401, Lockwire
- (2) AMM 24-22-00/201, Electrical Power Control
- (3) AMM 71-11-04/201, Fan Cowl Panels
- (4) AMM 71-11-06/201, Core Cowl Panels
- (5) AMM 78-31-00/201, Thrust Reverser System

D. Access

- (1) Location Zones
 - 410 No. 1 Power Plant (Left engine)
 - 420 No. 2 Power Plant (Right engine)

4
0
0
5

EFFECTIVITY

REPLACE

36-11-19-4B

ENGINE 2 PRV CONTROLLER AIR FILTER

36-014-02-2 PAGE 3 OF 7 APR 22/05

SAS



767

TASK CARD

BOEING CARD NO. 36-014-02-2
AIRLINE CARD NO.

MECH	INSP

(2) Access Panels

- 413AL Left Fan Cowl (Left engine)
- 415AL Left Thrust Reverser (Left engine)
- 417AL Left Core Cowl (Left engine)

- 423AL Left Fan Cowl (Right engine)
- 425AL Left Thrust Reverser (Right engine)
- 427AL Left Core Cowl (Right engine)

E. PRV Controller Air Filter Installation

- (1) Install the filter (30) and the spring (29) in the PRV controller (1).
- (2) Install a new packing (28) on the filter plug (27).
- (3) Lubricate the filter plug (27) threads with the antiseize compound.
- (4) Install the filter plug (27) in the PRV controller (1).
- (5) Tighten the filter plug (27) to 10-20 pound-inches.
- (6) Install the lockwire (AMM 20-10-23/401).

F. Put the Airplane Back To It's Usual Condition

- (1) Close up the access to the Pressure Regulating Valve Controller (PRVC) on the 'left' side of the associated (left/right) engine:

WARNING: OBEY THE INSTRUCTIONS IN THE PROCEDURE TO CLOSE THE THRUST REVERSERS. IF YOU DO NOT OBEY THE INSTRUCTIONS, INJURIES TO PERSONS AND DAMAGE TO EQUIPMENT CAN OCCUR.

- (a) Close the associated left thrust reverser (415AL/425AL) (AMM 78-31-00/201).
- (b) Close the associated left core cowl panel (417AL/427AL) (AMM 71-11-06/201).
- (c) Close the associated left fan cowl panel (413AL/423AL) (AMM 71-11-04/201).
- (d) Do the activation procedure for the thrust reversers for ground maintenance (AMM 78-31-00/201).

4
0
0
6

EFFECTIVITY

--

REPLACE

36-11-19-4B

ENGINE 2 PRV CONTROLLER AIR FILTER

36-014-02-2 PAGE 4 OF 7 APR 22/05

SAS  **BOEING**
767
TASK CARD

BOEING CARD NO. 36-014-02-2
AIRLINE CARD NO.

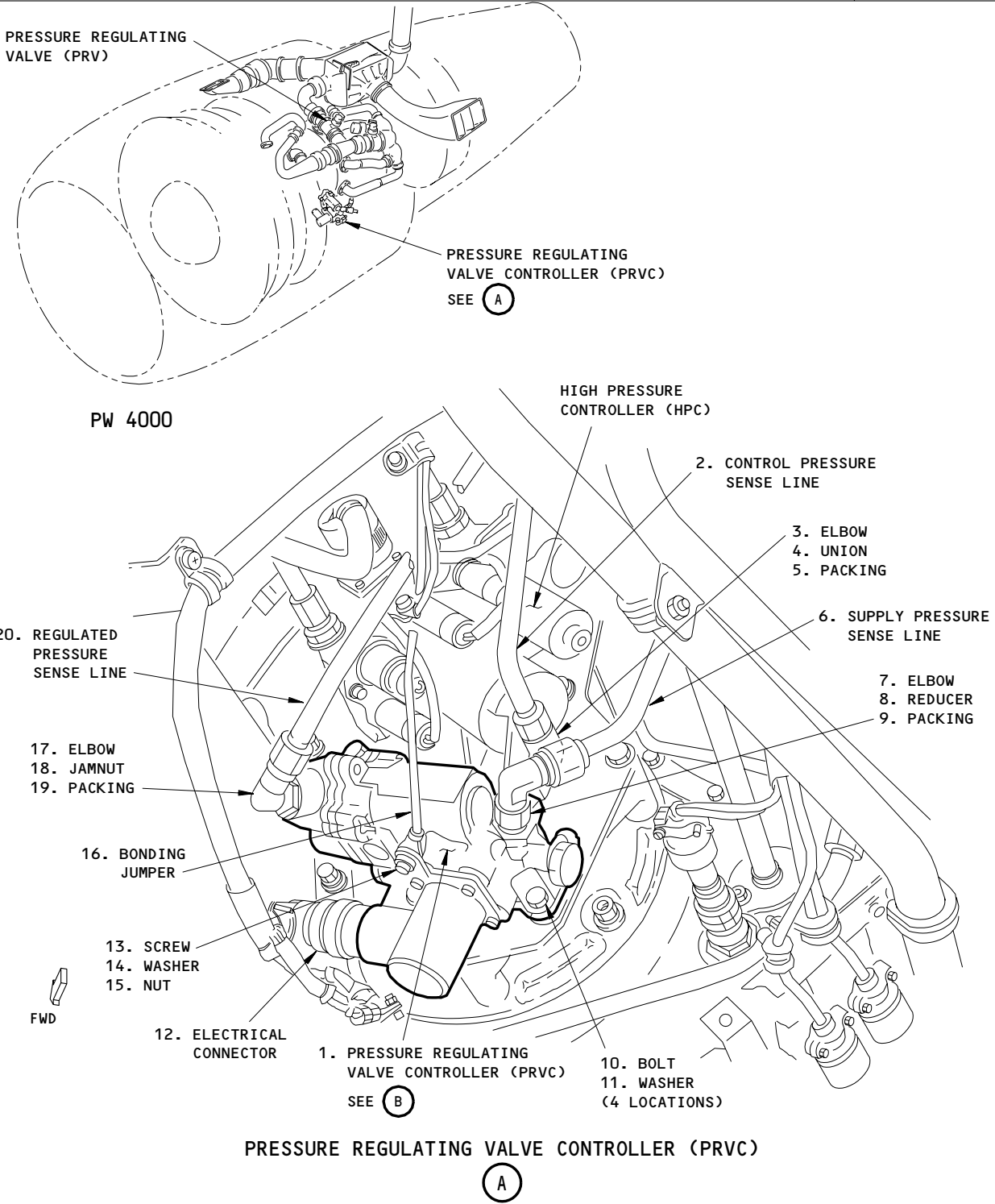
MECH	INSP

(2) Remove electrical power if it is not necessary (AMM 24-22-00/201).

4
0
0
7

EFFECTIVITY	REPLACE	ENGINE 2 PRV CONTROLLER AIR FILTER
	36-11-19-4B	36-014-02-2 PAGE 5 OF 7 APR 22/05

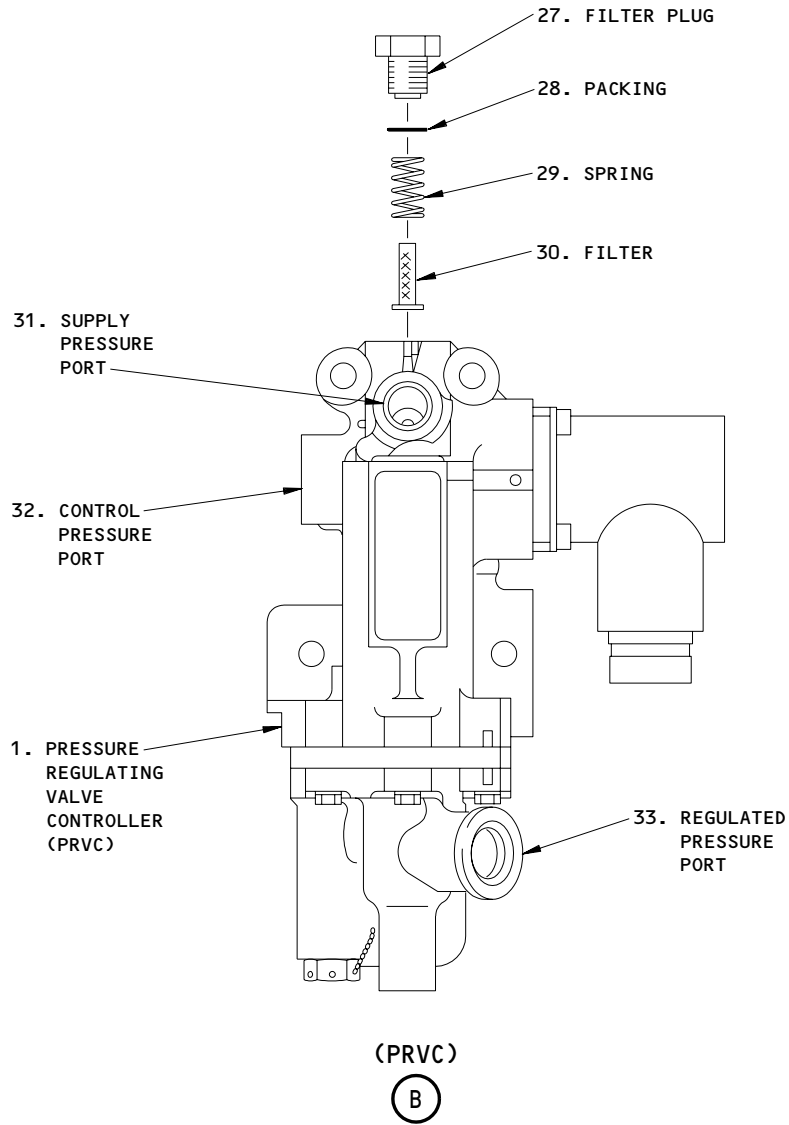
SAS **BOEING** 767
 TASK CARD



Pressure Regulating Valve Controller (PRVC)
 Figure 401 (Sheet 1)

4 0 0 8	EFFECTIVITY	REPLACE	ENGINE 2 PRV CONTROLLER AIR FILTER
	373225	36-11-19-4B	36-014-02-2 PAGE 6 OF 7 APR 22/05

SAS



Pressure Regulating Valve Controller (PRVC)
Figure 401 (Sheet 2)

4
0
0
9

EFFECTIVITY

373217

REPLACE

36-11-19-4B

ENGINE 2 PRV CONTROLLER AIR FILTER

36-014-02-2 PAGE 7 OF 7 APR 22/05